

# Family Planning Needs of Adolescents in Predominantly Rural Communities in the Central Part of Ghana

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## Abstract

The manuscript presents findings of a descriptive analysis of data from a cross-sectional study of adolescents aimed at identifying their family planning needs and the best approaches to addressing them in the Kintampo Districts of Ghana. Data for the paper were from the family planning module of a sexual and reproductive health survey carried out by the Kintampo Health and Demographic Surveillance System in 2011. Adolescents in this study recorded high marital (1.6% females and 0.4% males) and pregnancy rates (11.5% females and 1.5% males). Their knowledge of contraceptive methods was high (87.7% females and 82% males), but utilization was low (17.9% females and 6% males). Most study participants viewed family planning as important to their health and wellbeing (59.6% females and 58.6% males). A minority of adolescents were of the perception that contraceptive use was solely the responsibility of women (41.1% females and 32.4% males); and that the use of contraceptives could lead to promiscuity among women (43.8% females and 42.5% males). Those adolescents who previously had unwanted pregnancies would have accepted some help in preventing it (33.1% females and 9.1% males). Recommendations made by respondents included creating a friendly atmosphere by care providers for family planning services delivery to adolescents. Other suggestions were ensuring that family planning services are available and accessible to adolescents, and educating adolescents on the diverse methods available.

## Keywords

Adolescents, Family Planning, Contraceptives, Kintampo, Ghana

## 1. Introduction

Adolescence is the period between the ages of 10 and 19 years when young individuals transition into adulthood [1] [2]. The period is referred to as early (10 - 14 years) and late (15 - 19 years) adolescence [3] [4] by some whereas others defined it as early (*i.e.* 10 - 13 years), mid- (*i.e.* 14 - 15 years) and late (*i.e.* 16 - 19 years) adolescence [2]. For this study we make use of the former definition of adolescence, as the extant literature alludes more to that categorization of the period [1] [2] [5]. Adolescents in 2010 made up over a fifth (22.4%) of the total population of 24.7 million people in Ghana [6]. Similar to the national figures, adolescents in the Kintampo North and South districts where this study was carried out make up a fifth (20.2%) of the resident population of 136,356 [7].

Family planning (FP) aims at empowering persons to anticipate and attain the number of children they desire whilst spacing and timing their births appropriately [8]. The use of contraceptive methods and involuntary treatment of infertility facilitates this process. Spacing and limiting of pregnancies has a great impact on the health and wellbeing of women, and on pregnancy outcomes [8].

The total fertility rate (TFR) in Ghana has risen to 4.3 in 2011 [9] from 4.0 per female in 2008 [10]. Though age specific fertility rate (ASFR) declined from 66 in 2008 [10] to 60 per 1000 births in 2011 [9] for adolescents 15 to 19 years of age, their pregnancy rates remain high in Ghana—1% of the age group have a live birth by age 15 years [9]. Records from the Kintampo Health and Demographic Surveillance System (KHDSS) show that approximately 10% of all births each year between 2005 and 2009 in the Kintampo North and South districts were to adolescent mothers [11].

Pregnancies and births among adolescents are mostly unplanned and are associated with higher maternal and infant complications/mortality as compared with those in older women [12] [13]. Encouraging FP uptake among adolescents is vital to reducing maternal mortality (MDG 5) in this population as well as infant mortality (MDG 4) [12] [13]. Unplanned pregnancies among adolescents often result in unsafe abortions and pose higher risks of adverse outcomes for both the mother and the newborn [14]: the maternal mortality ratio among adolescents is twice that of women in their twenties [2]. Infant and child deaths are higher among those born to adolescent mothers [2] [15].

In the midst of such high levels of adolescent pregnancies, contraceptive use in Ghana remains low among this population. The knowledge of at least one type of contraceptive was generally low among adolescents aged 15 to 19 years [6]; the use of any contraceptive method was lowest in the 15 to 19 years cohort with females at 19.5% and males at 14.7% [6]; as of 2011, 17% of females in union of the age cohort used contraceptives [9]. Contraceptive use is known to prevent between 20 and 35 percent of maternal deaths, but social norms, limited FP supplies and social services prevent their correct and consistent use by adolescents in most low- and middle- income countries (LMICs) [13]. FP information and education for adolescents is limited to those who are married [9]. In a recent study in the Kintampo North and South districts, adolescents had low levels of knowledge and use of contraceptive methods with the exception of the male condom [16]. This paper seeks to provide an overview of the current situation of FP needs of adolescents in the study area to advise measures at addressing them.

The study's objective was to identify the FP needs of the adolescent population in the Kintampo North and South Districts in Ghana and to define the best approach to satisfying these needs.

## 2. Methods

The Kintampo Health and Demographic Surveillance System (KHDSS), administered by the Kintampo Health Research Centre (KHRC), regularly collects information on the health and demographic needs of residents from the Kintampo North and South Districts in the Brong Ahafo Region of Ghana [11]. The KHDSS conducted a Sexual and Reproductive Health (SRH) survey from July 2011 to December 2011.

The study was cross-sectional, with a mixed methods design and data collected from multi-informant sources. Data collection included the use of structured questionnaires consisting of close-ended questions administered to study participants in the study area. The survey was designed to allow for a reliable estimation of SRH behavior, contraception knowledge and use, fertility preferences, and knowledge and prevalence of self-reported sexually transmitted infections (STIs) within the study population.

Data for this paper was extracted from the FP module of the SRH survey. Relevant information on adolescents' FP needs and their views on FP with respect to personal health and wellbeing were collated.

The questions in the module were adapted from the 2008 Ghana Demographic and Health Survey (GDHS) [10]

as well as A Guide to Monitoring and Evaluating Adolescent Reproductive Health Programs [9] and were revised to suit the population under study. Well-trained and experienced research assistants who have been collecting data for the KHDSS from the community over the past years administered the questionnaires. Considering the sensitive nature of the information solicited and the study population, research assistants received appropriate training prior to going into the community, and they followed rigorous consenting procedures before admitting subjects into the study.

A total of 2641 adolescents (10 to 19 years of age) were sampled based on a contraceptive prevalence of 23% [9]. We assumed a worst acceptable prevalence of 20.5% among the study population with a 95% confidence level, an 80% statistical power and an estimated non-response rate of 20%. Those interviewed comprised of 1805 females and 836 males from a resident adolescent population of 34,886 (16,795 females and 18,091 males) within the KHDSS as of July 2011.

## 2.1. Data Management and Analysis

Data was double entered into Microsoft FoxPro with verification and consistency checks applied. The data was then verified for accuracy and transferred to STATA 11.0 for analysis. The main themes analyzed were FP needs of adolescents and FP's importance to their health and wellbeing. Means, medians and proportions were used to describe characteristics and responses of respondents.

## 2.2. Ethical Approval

The Kintampo Health Research Centre Institutional Ethics Committee (KHRC IEC) approved the study ahead of its implementation. Considering that FP research involves asking respondents about their sexual behaviors and practices, which may cause some level of embarrassment to respondents, we ensured that the respondents were primed and educated on the sensitive issues envisaged in the questionnaires. They were only interviewed after they had thoroughly understood the essence and content of the survey, asked questions that were answered to their satisfaction and assented or consented to be part of the study. For persons under 18 years of age who assented, a parent or guardian consented as well on their behalf. Confidentiality of data collected was maintained by storing them at the secured KHRC data bank.

## 3. Results

After data cleaning, 2128 out of an estimated 2641 adolescents sampled (80.6% response rate) were included in the data analysis. These consisted of 1415 (66.5%) females and 713 (33.5%) males.

### 3.1. Background Characteristics of Respondents

**Table 1** previews the demographics of the study population. Close to two-thirds of both female and male respondents in the study area reside in rural communities. Over four-fifths (83.3%) of adolescent females and a little under three-fourths (76.4%) of adolescent males involved in this study have a primary education or higher. Close to 2% of females and less than 1% of males were married, whilst about 12% and 2% respectively were living together with their partners. The total fertility rate (TFR) of the study population was 4.0. The Age Specific Fertility Rate (ASFR) for 10 - 14 year olds was 0 (zero) and that for 15 - 19 year olds 55.6 per 1000 women. The Contraceptive Prevalence Rate (CPR) for 10 - 14 year olds was 0% and that for 15 - 19 year olds 25%.

### 3.2. Sexual Activity, First Marriage and First Birth

At the time of the study, 388 (27.4%) female and 63 (8.8%) male adolescents were sexually active; with a fifth of females' [70 (18.0%)] and a fourth of males' [16 (26.1%)] first sex occurring in early adolescence. The median age at first sex (the first time in their lives they ever performed a sexual act) and marriage was 16 for both genders. Median age at first birth was 17 for females and 16 for males. It is also worth noting that an overwhelming majority of early adolescents [407 (98.5%) females and 423 (98.6% males)] had not had sex at the time of the survey.

### 3.3. Not Being Ready for a Pregnancy and Willing to Accept Help to Prevent It

Females recorded more pregnancies [168 (11.9%) to 11 (1.5%)] and births (11% to 1.4%) than males, with most

**Table 1.** Background information about participants.

	Female n (%)			Male n (%)		
	10 - 14 (n = 413)	15 - 19 (n = 1002)	10 - 19 (n = 1415)	10 - 14 (n = 429)	15 - 19 (n = 284)	10 - 19 (n = 713)
<b>Place of residence</b>						
Rural	285 (69.1)	624 (62.3)	910 (64.3)	299 (69.8)	196 (69.1)	496 (69.5)
Urban	128 (30.9)	378 (37.7)	505 (35.7)	130 (30.2)	88 (30.9)	217 (30.5)
<b>District of residence</b>						
Kintampo North	245 (59.3)	623 (62.2)	867 (61.3)	262 (61.1)	173 (60.9)	435 (61.0)
Kintampo South	168 (40.7)	379 (37.8)	548 (38.7)	167 (38.9)	111 (39.1)	278 (39.0)
<b>Current educational attainment</b>						
No education	142 (34.4)	77 (7.7)	219 (15.5)	142 (33.1)	19 (6.7)	161 (22.6)
Primary	264 (63.9)	580 (57.9)	844 (59.6)	274 (63.9)	194 (68.3)	468 (65.6)
JHS & higher	2 (0.5)	334 (33.3)	336 (23.7)	8 (1.9)	69 (24.3)	77 (10.8)
*Missing	5 (1.2)	11 (1.1)	16 (1.2)	5 (1.1)	2 (0.7)	7 (1.0)
<b>Marital status</b>						
Married	1 (0.2)	22 (2.2)	23 (1.6)	0 (0.0)	3 (1.1)	3 (0.4)
Living together	1 (0.2)	170 (17.0)	171 (12.1)	1 (0.2)	16 (5.6)	17 (2.4)
Divorced	0 (0.0)	3 (0.3)	3 (0.2)	0 (0.0)	1 (0.4)	1 (0.1)
Separated	0 (0.0)	20 (2.0)	20 (1.4)	0 (0.0)	1 (0.4)	1 (0.1)
Never being in a relationship	404 (97.8)	776 (77.4)	1180 (83.4)	427 (99.5)	262 (92.3)	689 (96.6)
Missing	7 (1.7)	11 (1.1)	18 (1.3)	1 (0.2)	1 (0.4)	2 (0.3)

\*Missing-missing values.

of them occurring in late adolescence [167 (16.7% to 8 (2.8%)]. A third [60 (35.5%)] of ever-pregnant females and about a fifth [2 (18.2%)] of males were not ready for a pregnancy (the pregnancy was unintended); most of those who were not ready for a pregnancy [56 (33.1% females) and 1 (9.1% males)] would have accepted help in the form of FP methods to prevent it (Table 2).

### 3.4. Knowledge of and Ever Use of FP Methods

Knowledge of any method and modern methods of contraception was the same across age ranges and marital status, whereas their utilization varied (Table 3 & Table 4). Females were slightly more knowledgeable (87.7% to 82.0%) and used more contraceptives (17.9% to 6.0%) than the males.

Both females and males (48.6% and 33.9% respectively) had less knowledge of traditional methods. Early adolescents knew and utilized less of all the forms of contraception. Adolescents who had been in a relationship had higher levels of knowledge and use of contraceptives than those who had never been in any relationships (and were not sexually active).

Sexually active adolescents in no relationships had the highest level of knowledge of FP methods. Contraceptive use was higher among males in relationships than their female counterparts.

### 3.5. Use of FP Methods Currently, at Last Sex and Immediate Future

Family planning method use was low for sexually active adolescents (9.1% currently and 10.9% at last sex). FP use by late adolescents was higher than that of early adolescents. Adolescents in relationships and those who were sexually active recently utilized FP methods more than those not in relationships.

At their last sexual activity, most females (41.1%) used no FP methods, 20.9% used the male condom, 16.6%

**Table 2.** Adolescents who have ever been unprepared for pregnancy and would have accepted help to prevent it.

	Female n (%)		Male n (%)	
	Not ready for pregnancy n = 168	Accept help to prevent pregnancy n = 168	Not ready for pregnancy n = 11	Accept help to prevent pregnancy n = 11
<b>Age range</b>				
10 - 14	1 (50.0)	1 (50.0)	0 (0.0)	0 (0.0)
15 - 19	59 (35.3)	55 (32.9)	2 (25.0)	1 (12.5)
10 - 19	60 (35.5)	56 (33.1)	2 (18.2)	1 (9.1)
<b>Marital status</b>				
Never being in a relationship	17 (44.7)	16 (42.1)	0 (0.0)	0 (0.0)
Married/living together	40 (34.5)	36 (31.0)	2 (40.0)	1 (20.0)
Widowed/divorced/separated	3 (20.0)	4 (26.7)	0 (0.0)	0 (0.0)
<i>Total</i>	60 (35.5)	56 (33.1)	2 (18.2)	1 (9.1)
Never being in a relationship but recently sexually active	4 (50.0)	3 (37.5)	0 (0.0)	0 (0.0)

Note: Percentages are based on females who have ever been pregnant and males who have ever impregnated a woman.

**Table 3.** Contraceptive knowledge of adolescents.

	Female n (%)			Male n (%)		
	Heard of any method n = 1415	Heard of any modern method n = 1415	Heard of any traditional method n = 1415	Heard of any method n = 713	Heard of any modern method n = 713	Heard of any traditional method n = 713
<b>Age range</b>						
10 -14	300 (72.6)	300 (72.6)	71 (17.2)	315 (73.4)	315 (73.4)	77 (17.9)
15 - 19	941 (93.9)	941 (93.9)	617 (61.6)	270 (95.1)	270 (95.1)	165 (58.1)
10 - 19	1241 (87.7)	1241 (87.7)	688 (48.6)	585 (82.0)	585 (82.0)	242 (33.9)
<b>Marital status</b>						
Never being in a relationship	1024 (86.8)	1024 (86.8)	517 (43.8)	563 (81.7)	563 (81.7)	223 (32.4)
Married/living together	191 (99.0)	191 (99.0)	152 (78.8)	19 (95.0)	19 (95.0)	17 (85.0)
Widowed/divorced/separated	23 (100.0)	23 (100.0)	18 (78.3)	2 (100.0)	2 (100.0)	2 (100.0)
NK/NA/Missing	3 (15.8)	3 (15.8)	1 (5.3)	1 (50.0)	1 (50.0)	0 (0.0)
<i>Total</i>	1241 (87.7)	1241 (87.7)	688 (48.6)	585 (82.0)	585 (82.0)	242 (33.9)
Never being in a relationship but recently sexually active	86 (100.0)	86 (100.0)	73 (84.9)	23 (100.0)	23 (100.0)	18 (78.3)

used the rhythm method, 13.8% the pill and 3.6% the injectable. In contrast to what they used, females preferred the injectable (35.2%), followed by the pill (20.6%), and close to a fifth of them (19.4%) preferred no methods at all. Males at the last sexual act used the male condom (65.1%) and withdrawal method (2.3%), but a fourth (25.1%) of them used no method at all.

Majority of females (53.6%) were intent on using a method in the future, with late adolescents predominating (59.9%). Those who were in relationships (87%) were more intent on future use than those not in relationships (50.8%).

Male late adolescents (71.5%) were much more aware of places they could access condoms than the younger ones (40.8%) (**Table 5**).

**Table 4.** Adolescents who have ever used FP.

	Female n (%)			Male n (%)		
	Used any method n = 1415	Used any modern method n = 1415	Used any traditional method n = 1415	Used any method n = 713	Used any modern method n = 713	Used any traditional method n = 713
<b>Age range</b>						
10 -14	4 (1.0)	3 (0.7)	3 (0.7)	3 (0.7)	2 (0.5)	1 (0.2)
15 - 19	249 (24.9)	191 (19.1)	156 (15.6)	40 (14.1)	37 (13.0)	18 (6.3)
10 - 19	253 (17.9)	194 (13.7)	159 (11.2)	43 (6.0)	39 (5.5)	19 (2.7)
<b>Marital status</b>						
Never being in a relationship	101 (8.6)	70 (5.9)	66 (5.6)	26 (3.8)	22 (3.2)	11 (1.6)
Married/living together	139 (72.0)	113 (58.5)	86 (44.6)	15 (75.0)	15 (75.0)	7 (35.0)
Widowed/divorced/separated	12 (52.2)	10 (43.50)	6 (26.1)	2 (100.0)	2 (100.0)	1 (50.0)
NK/NA/Missing	1 (5.3)	1 (5.3)	1 (5.3)	0 (0.0)	0 (0.0)	0 (0.0)
<i>Total</i>	253 (17.9)	194 (13.7)	159 (11.2)	43 (6.0)	39 (5.5)	19 (2.7)
Never being in a relationship but recently sexually active	47 (54.7)	38 (44.2)	28 (32.6)	13 (56.5)	12 (52.2)	6 (26.1)

**Table 5.** Use of FP methods currently, at last sex and the immediate future.

	Female n (%)			Male n (%)	
	Currently using a method n = 1415	Used a method at last sex n = 1415	Intention to use in the future n = 1415	Knows where to get condoms n = 713	Used a method at last sex n = 713
<b>Age range</b>					
10 -14	0 (0.0)	1 (0.2)	158 (38.3)	175 (40.8)	1 (0.2)
15 - 19	129 (12.9)	153 (15.3)	600 (59.9)	203 (71.5)	24 (12.0)
10 - 19	129 (9.1)	154 (10.9)	758 (53.6)	378 (53.0)	35 (4.9)
<b>Marital status</b>					
Never being in a relationship	49 (4.2)	65 (5.5)	599 (50.8)	359 (52.1)	23 (3.3)
Married/living together	74 (38.2)	82 (42.5)	138 (71.5)	17 (85.0)	10 (50.0)
Widowed/divorced/separated	5 (21.7)	6 (26.1)	20 (87.0)	2 (100.0)	2 (100.0)
NK/NA/Missing	1 (5.3)	1 (5.3)	1 (5.3)	0 (0.0)	0 (0.0)
<i>Total</i>	129 (9.1)	154 (10.9)	758 (53.6)	378 (53.0)	35 (4.9)
Never being in a relationship but recently sexually active	27 (31.4)	34 (39.5)	65 (75.6)	23 (100.0)	14 (60.9)

### 3.6. Main Source of FP Information

Radio was the main source of information on FP (29.1% for females and 30.1% for males), followed by television (19.9% females and 15.4% males) and socializing [Socializing is defined as taking part in activities such as fetching of water from outside the compound, going to farm or market, or visiting the hairdresser or the seamstress for females and for males included playing indigenous indoor games like draught, ludo and oware or visiting alcohol drinking spots in the community] (19.1% females and 10.7% males) in the 3 months preceding the survey.

### 3.7. Importance of FP to Health and Well Being

With the exception of early adolescents and males who had never been in a relationship but were recently sex-

ually active, a majority of each category of respondents agreed on the importance of FP in reducing unwanted pregnancies, reducing STI risk, improving maternal and child health, reducing maternal deaths, and ultimately improving the health and well-being of individuals (Table 6 & Table 7).

### 3.8. Perceptions of FP Use

Table 8 & Table 9 sum up adolescents' perceptions on FP and related social issues. Females who were married/living together (57.5%) viewed FP as the responsibility of women alone. Males that had never been in a relationship but were recently sexually active (78.3%) and widowed/separated/divorced females (65.2%) were of the view that FP makes women promiscuous.

**Table 6.** Importance of FP to adolescents (Females).

	Females n (%)				
	Reduce unwanted pregnancies (n = 1415)	Reduce STI risk (n = 1415)	Improve MCH (n = 1415)	Reduce maternal deaths (n = 1415)	Improve health and well-being (n = 1415)
<b>Age range</b>					
10 -14	162 (39.2)	112 (27.1)	167 (40.4)	139 (33.7)	173 (41.9)
15 - 19	743 (74.2)	489 (48.8)	662 (66.1)	598 (59.7)	670 (66.9)
10 - 19	905 (64.0)	601 (42.5)	829 (58.6)	737 (52.1)	843 (59.6)
<b>Marital status</b>					
Never being in a relationship	719 (60.9)	483 (40.9)	670 (56.8)	586 (49.7)	674 (57.1)
Married/living together	163 (84.5)	102 (52.8)	138 (71.5)	133 (68.9)	147 (76.2)
Widowed/divorced/separated	20 (87.0)	14 (60.9)	19 (82.6)	16 (69.6)	20 (87.0)
NK/NA/Missing	3 (15.8)	2 (10.5)	2 (10.5)	2 (10.5)	2 (10.5)
<i>Total</i>	905 (64.0)	601 (42.5)	829 (58.6)	737 (52.1)	843 (59.6)
Never being in a relationship but recently sexually active	77 (89.5)	56 (65.1)	72 (83.70)	65 (75.6)	71 (82.6)

**Table 7.** Importance of FP to adolescents (Males).

	Males n (%)				
	Reduce unwanted pregnancies (n = 713)	Reduce STI risk (n = 713)	Improve MCH (n = 713)	Reduce maternal deaths (n = 713)	Improve health and well-being (n = 713)
<b>Age range</b>					
10 -14	202 (47.1)	150 (35.0)	201 (46.9)	181 (42.2)	207 (48.3)
15 - 19	212 (74.6)	143 (50.4)	204 (71.8)	190 (66.9)	211 (74.3)
10 - 19	414 (58.1)	293 (41.1)	405 (56.8)	371 (52.0)	418 (58.6)
<b>Marital status</b>					
Never being in a relationship	397 (57.6)	283 (41.1)	386 (56.0)	760 (51.5)	399 (57.9)
Married/livingtogether	15 (75.0)	10 (50.0)	17 (85.0)	15 (75.0)	17 (85.0)
Widowed/divorced/separated	2 (100.0)	0 (0.0)	2 (100.0)	1 (50.0)	2 (100.0)
NK/NA/Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
<i>Total</i>	414 (58.1)	293 (41.1)	405 (56.8)	371 (52.0)	418 (58.6)
Never being in a relationship but recently sexually active	22 (95.7)	14 (60.9)	20 (87.0)	20 (87.0)	22 (95.7)

**Table 8.** Perceptions of FP use (Females).

	Females n (%)				
	Women's responsibility (n = 1415)	Makes women promiscuous (n = 1415)	Many children dangerous (n = 1415)	Better not to have more children (n = 1415)	Smaller families succeed (n = 1415)
<b>Age range</b>					
10 -14	127 (30.8)	119 (28.8)	235 (56.9)	286 (69.2)	257 (62.2)
15 - 19	455 (45.4)	501 (50.0)	773 (77.1)	897 (89.5)	823 (82.1)
10 - 19	582 (41.1)	620 (43.8)	1008 (71.2)	1183 (83.6)	1080 (76.3)
<b>Marital status</b>					
Never being in a relationship	458 (38.8)	502 (42.5)	829 (70.3)	974 (82.5)	886 (75.1)
Married/living together	111 (57.5)	102 (53.0)	157 (81.3)	184 (95.3)	171 (88.6)
Widowed/divorced/separated	10 (43.5)	15 (65.2)	19 (82.6)	22 (95.7)	20 (87.0)
NK/NA/Missing	3 (15.8)	1 (5.3)	3 (15.8)	3 (15.8)	3 (15.8)
<i>Total</i>	582 (41.1)	620 (43.8)	1008 (71.2)	1183 (83.6)	1080 (76.3)
Never being in a relationship but recently sexually active	38 (44.2)	48 (55.8)	75 (87.2)	84 (97.7)	76 (88.4)

**Table 9.** Perceptions of FP use (Males).

	Males n (%)				
	Women's responsibility (n = 713)	Makes women promiscuous (n = 713)	Many children dangerous (n = 713)	Better not to have more children (n = 713)	Smaller families succeed (n = 713)
<b>Age range</b>					
10 -14	130 (30.3)	155 (36.1)	247 (57.6)	303 (70.6)	278 (64.8)
15 - 19	101 (35.6)	148 (52.1)	208 (73.2)	246 (86.6)	231 (81.3)
10 - 19	231 (32.4)	303 (42.5)	455 (63.8)	549 (77.0)	509 (71.4)
<b>Marital status</b>					
Never being in a relationship	224 (32.5)	296 (43.0)	436 (63.3)	528 (76.6)	493 (71.6)
Married/living together	7 (35.0)	6 (30.0)	17 (85.0)	19 (95.0)	14 (70.0)
Widowed/divorced/separated	0 (0.0)	1 (50.0)	2 (100.0)	2 (100.0)	2 (100.0)
NK/NA/Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
<i>Total</i>	231 (32.4)	303 (42.5)	455 (63.8)	549 (77.0)	509 (71.4)
Never being in a relationship but recently sexually active	9 (39.1)	18 (78.3)	18 (78.3)	21 (91.3)	15 (95.7)

Most respondents viewed having many children as dangerous to a woman's health; thought it was better not to have many children and that smaller families were more likely to succeed in life.

#### 4. Discussion

Marital rates among adolescents in the study population seem to be higher than observed in other parts of Ghana, Benin and Burundi, but lower than in Nigeria, Burkina Faso, Cameroon, Central African Republic, Congo, Cote D'Ivoire and Ethiopia among others [9] [14] [17] [18]. Adolescent marital rates in sub-Saharan Africa are highest in the West followed by Central African countries and lowest in South Africa and Namibia [19] [20]. Some early adolescents in the current study were in some forms of relationships, a situation similar to most countries in the sub-region and beyond [21].

Though a minority, some amount of sexual activity occurred in early adolescence as observed by this study. Cases of adolescents being sexually active before their 15<sup>th</sup> birthday were identified from surveys across sub-Saharan Africa and beyond [12] [21]. By age 15, some 17% - 21% of adolescent females were sexually active in sub-Saharan Africa, the figure increasing to 57% - 59% by age 18 [12]. In the light of the above, existing sex education programs might require adjustments to incorporate measures such as provision of FP methods to early adolescents at risk of pregnancies. Pregnancy and birth rates in the study area were higher [9] [17] or lower [22] than in other places in Africa.

Though it is known that most of the pregnancies among adolescents are unwanted like occurred in this study, an interesting observation made was that respondents would have accepted FP services to help prevent them. Several births to mothers below 20 years of age in sub-Saharan Africa are either not wanted at all or wanted later; unwanted pregnancies were as high as 80% in South Africa and as low as 11% in Niger [12]. The above findings hint of unmet need in FP care to adolescents. As such, care providers need to create environments that would attract and make it easy for adolescents at risk of pregnancies to comfortably seek help for FP care. Providers as well should be on the lookout for adolescents with any signs of pregnancy risk and provide them with FP services to prevent them from getting pregnant in the first place.

The study population exhibited a higher knowledge of FP methods in contrast to their use [14]. Late adolescents significantly knew about and used contraceptives much more than early adolescents. Knowledge of traditional methods of contraception lagged behind the modern methods in this study population. Though current contraceptive use among the sexually active was low in this study, the rates were higher than those of other countries in the sub-region but below those in Egypt, Bangladesh, Indonesia and Nicaragua for example [21]. Females' contraceptive patronage was lower than that of males at their last sexual encounter. Possible reasons for this situation could be the fear of perceived complications from contraceptive use, and stigmatization from society and health workers [23] [24]. The study observed that the male condom and withdrawal were popular and common to both sexes. Another interesting observation by the study was that females would have preferred using the pill and injectable in the future, in direct contrast to their current use of the methods. The preference of injectables was due to its discreetness when used; its non-use could be due in part to access issues as it could not be procured in chemical shops in communities as compared to the condom and pills. There is the need therefore to provide or make accessible many more of the preferred methods to adolescents. The male condom was not as popular with females in other studies [9] [21]. Sexually active adolescents poorly use contraceptives; some other adolescents are not intending to use a FP method in the future; and the preference of injectables and pills call for a comprehensive review in approach to FP programs for adolescents with the involvement of as many stakeholders.

Prominent sources of FP information in the study communities were the electronic media, radio and television as identified by other published works [12] [21] followed by socializing. Other sources of information aside the electronic media mentioned in other studies included newspapers, journals [21], teachers and peers [9].

Adolescents in this study generally viewed FP as important to the health and wellbeing of individuals. Health and wellbeing programs could therefore serve as a window of opportunity for the introduction of FP programs. It is however important to address the less favourable concerns of some early adolescents and the never married with respect to them perceiving FP as being the responsibility of women and that it fuels promiscuity.

In spite of the sensitive nature of some information collected, there were no records of persons approached for interviews refusing participate in the study. This probably could be attributed to the study participants' urge to bring out issues of importance to them that hitherto had remained unaddressed.

#### 4.1. Limitations

This was a cross-sectional study to access the situation on the ground to advise further investigations and action on FP care to adolescents.

#### 4.2. Conclusions and Recommendation

- 1) Study findings point to the fact that adolescents in the study communities have FP needs that should be addressed—Pregnancy rates were high, contraceptive use was low, preferred methods such as injectables were not accessible to them and those with prior pregnancies would have accepted help to prevent them. The following recommendations are made to stakeholders involved in FP service delivery to adolescents:

- 2) *Healthcare policy makers*—Aside age appropriate sexual health education, FP education and services should be accessible to early adolescents at risk of engaging in sex and those in non-marital relationships. Encourage the training of peer educators in FP programs to enhance information dissemination among adolescents. Ensure policies and other measures to enhance access of adolescents to diverse FP methods including the injectable and pill so as to satisfy their preferences.
- 3) *Healthcare providers*—Providers should educate adolescents on diverse FP methods including the injectable and pills; and ensure their accessibility. Providers should take advantage of social gatherings of adolescents to deliver FP education messages. FP messages could be introduced when providing talks on overall health and wellness. Providers should have a friendly approach to adolescents (both early and late) who seek help, and be preemptive in providing FP methods to adolescents (early and late) who might require them but are not bold to demand them.
- 4) *The research community*—Collaborate with service providers, educators, adolescents and the community in defining appropriate sex education programs to accommodate early adolescents at risk of pregnancy. Design studies that further investigate associations between these findings and others to provide evidence based approaches to facilitate FP programs uptake by adolescents.

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