Draft paper- Improving family planning service delivery to adolescents in Ghana: Evidence from the Kintampo North Municipality and Kintampo South District of the Brong Ahafo Region

Introduction

Background

Adolescence is the period between the ages of 10 and 19 years when young individuals transition into adulthood [2 & 3]. This period is subdivided by some writers into early (10 -14 years) and late (15-19 years) adolescence [4 & 5] whereas others refer to early (10 – 13 years), mid- (14 – 15 years) and late (16 – 19 years) adolescence [2]. As per the 2000 population census, adolescents constitute a fifth (21.9%) of the total population of 18.8 million people in Ghana [7]. In the Kintampo North Municipality and the Kintampo South district covered by the KHDSS, adolescents make up a fifth (20.2%) of the population of 136,356 people, similar to the national figures [12].

Family planning (FP) aims at empowering individuals and couples to anticipate and attain their desired number of children whilst appropriately spacing and timing their births. This process is achieved mainly through the use of contraceptive methods and the treatment of involuntary infertility. The spacing and limiting of pregnancies has a great impact on a woman's health and well-being; as well as on outcome of each pregnancy [1].

The situation of pregnancies and maternal deaths among adolescents

Lifestyle choices made during adolescence could enhance or diminish future health states [6], as young people are exposed to risks such as substance use, unprotected sexual behavior, and behavioral disorders. Risky behaviors together with adjustment difficulties at a young age are associated with negative outcomes such as early pregnancy with its associated complications [2]. Pregnancy rates among adolescents 15 to 19 years of age remain high in Ghana; in-spite of a decline from 14% in 2000 to 12.2% as of 2007 [7]. The Brong Ahafo Region of Ghana, where this study was undertaken recorded 13.4% adolescent births in 2007 as compared to 14.5% in 2000 [7]. Records from the Kintampo Health and Demographic Surveillance System (KHDSS) show that 3% of all births in the Kintampo North Municipality and the Kintampo South district between 2005 and 2008 were due to adolescent mothers. Pregnancies and births among adolescents are mostly unplanned and are associated with higher maternal and infant complications/mortality as compared to their older compatriots. Unplanned pregnancies among adolescents often result in abortions under unsafe conditions and pose higher risks of adverse outcomes for both the mother and the newborn: the maternal mortality ratio among adolescents is twice that of women in their twenties [3]. Infant and child deaths are higher among those born to adolescent mothers [3 & 10]. In the midst of such high levels of unwanted adolescent pregnancies and abortions, general contraceptive use is low among this population in Ghana. According to the 2008 Ghana Demographic Health Survey, knowledge of at least one type of contraceptive is generally low among adolescents aged 15 to 19 years [7]; the use of any contraceptive method is lowest in the 15 to 19 year cohort with females at 19.5% and males at 14.7% [7].

Family planning and its role in reducing pregnancies and maternal deaths among adolescents

Encouraging FP uptake among adolescents is very vital to reducing maternal mortality (MDG 5) in this population as well as infant mortality (MDG 4) from resultant births and other complications [8].

Contraceptive use is known to prevent between 20 and 35 percent of maternal deaths, but social norms, limited family planning supplies and social services prevent their appropriate use by adolescents in most low and middle income countries [8]. Information generally on family planning needs of adolescents is limited to the married ones [7]. A recent study of sexual and reproductive health needs of adolescents in the Kintampo North Municipality and the Kintampo South district point to a poor knowledge and use of other contraceptive methods with the exception of the male condom [9].

Justification of the current study

The KHDSS over the past 10 years recruited about 200,000 females into a vitamin A supplementation study. Female adolescents were recruited at age 10 years, followed up till they reached 15 years of age and were given vitamin A supplementation. Outcomes monitored in the course of the study were pregnancies, births and birth outcomes (maternal and neonatal mortality) [12]. Based on the above interventional study, the KHDSS has accumulated a wealth of data on fertility and its determinants in the Kintampo North Municipality and the Kintampo South district. The current study sought to move a step further by generating evidence to guide FP service delivery to adolescents in the two administrative districts from quantitative data on FP from the KHDSS together with qualitative data from focus group discussions and in-depth interviews.

Study objective and research objectives

The objective of the study was to identify the FP needs of the adolescent populace in the Kintampo North Municipality and the Kintampo South District and to define the best approach to satisfying their needs. This objective was addressed by responding to the following research questions.

1. What are the FP needs of adolescents?
2. Do adolescents view FP as important to their health and well-being?
3. What are (a) societal and (b) health care provider perspectives on FP care delivery to adolescents?
4. What are the views of (a) adolescents, (b) society and (c) health care providers as to how best to address their family planning needs?

Methodology

The Kintampo Health Research Centre (KHRC) has a Health and Demographic Surveillance System (KHDSS) that constantly collects information on the health needs of the population from the Kintampo North Municipality and the Kintampo South District of the Brong Ahafo Region. The KHDSS conducted an Adolescent Sexual and Reproductive Health (ASRH) survey from August to November 2011. In all, a sample of 2,641 was estimated; comprising 1805 females and 836 males aged 10 to 19 from a resident population of 34,886 (16,795 females and 18,091

males) within the KHDSS as at July 2011. The survey was designed to allow for a reliable estimation of reproductive health behavior, contraception, fertility preferences, knowledge and prevalence of self-reported sexually transmitted infections in communities within the Kintampo North Municipality and Kintampo South Districts of Ghana.

Study design

The study design for this project was cross-sectional. The study employed a mixed-methods (quantitative and qualitative) approach. Data was collected from multi-informant sources (adolescents, community members and health care providers in the study area).

Sampling procedure

For the quantitative arm of the study, sampling was random, whereas that for the qualitative arm was purposive. Data for the Adolescent Sexual and Reproductive Health (ASRH) survey was collected within as part of a larger Sexual and Reproductive Health (SRH) survey conducted by the KHDSS. The SRH survey randomly sampled females aged 15 to 49 as well as their male partners in the case of those who were either married or living together. Furthermore, males aged 15 to 24 were randomly sampled to augment for members of this age group who would not have been in any relationships. To cover the full spectrum of adolescents for the purposes of the ASRH study, a random sample of males and females aged 10 to 14 years was included in the study. In all, a total of 2641 adolescents (10 to 19 years) were sampled for the ASRH study, consisting of 1805 females and 836 males. The details of the sub-samples (sub-populations) are summarized below:

For the main SRH survey, 1,305 females aged 15 to 19 years were initially sampled. However, for the purposes of the ASRH study, a sample size of 610 (554 estimated and a 10% anticipated loss to follow-up) was required from a population of 7,132 females aged 10 - 14 years, at a confidence interval (CI) of 95% and precision of +/- 0.04. This sample was based on an estimated proportion of contraceptive use of 51% from the 2004 National Survey on Adolescents [14].

Similarly, 336 males aged 15 to 19 years had previously been sampled for the main SRH survey. At a CI of 95% and precision of +/- 0.06, a sample size of 249 (226 estimated and a 10% anticipated loss to follow-up) was required for the ASRH study from a population of 8,016 males aged 10 -14 years, using an estimated proportion of condom use of 68% from the 2004 National Survey on Adolescents [14].

Finally, one thousand (1000) 10 to 14 year-olds (i.e. 500 of each gender) were further sampled for the ASRH survey.

Quantitative methods

Quantitative data addressed research questions 1 and 2. The data was extracted from material gathered through the administration of the KHDSS family planning module. A structured questionnaire consisting of close ended questions of the family planning module was administered to adolescents in the study area. Relevant data on adolescents' family planning needs and their views of family planning with respect to their health and well-being were collated. The questions in the module were adapted from the 2008 Ghana Demographic and Health Survey [7] and A Guide to Monitoring and Evaluating Adolescent Reproductive Health Programs [11] and revised to suit the population under study.

The questionnaires were administered to the study participants by well trained and experienced research assistants who have been collecting data from the community for the KHDSS over the past few years.

Qualitative methods

The qualitative section of the study was approached from an interpretive paradigm. This paradigm was to facilitate in gaining a deeper insight into societal and cultural factors that influenced family planning use by adolescents in the study community.

The methodology employed was phenomenology, which provided the optimal direction for addressing the family planning needs of adolescents based on the experiences and perspectives of the study participants in the context of their societal norms and practices.

The methods of data collection were focus group discussions (FGDs) and in-depth interviews (IDIs) using interview guides. Five (5) FGDs and 11 IDIs were conducted over the study period. The FGDs and IDIs were recorded on an electronic audio device together with hand-written notes. Qualitative data collected from adolescents, societal representatives and FP care providers working in health facilities was to address research questions 3 and 4. Two (2) FGD was conducted for community opinion leaders and 3 for adolescents with each group having between 8 and 12 participants. IDIs were done among health workers and community representatives till a level of saturation of information is attained.

Data Analysis:

Quantitative data analysis

Data collected was double-entered initially into Microsoft FoxPro with verification and consistency checks applied. The data then verified for accuracy was then transferred to STATA 11.0 for analysis.

The main outcomes of the quantitative analysis are the FP needs of adolescents and FP's importance to their health and well-being. Means, medians and proportions were used to describe characteristics and responses of respondents. Cross-tabulations were used to show bivariate or multi-way relationships between variables.

Qualitative data analysis

Qualitative data was analyzed manually. Audio recordings of FGDs and IDIs were transcribed and translated verbatim into English and manual coding into the various themes influencing FP service delivery to adolescents was done by two researchers. The identified themes and quotes backing them were included in the report of the study. The outcome of the qualitative analysis is to identify how best to address the FP needs of adolescents from the perspectives of adolescents, community representatives and family planning care providers.

Ethical review

The Kintampo Health Research Centre Ethics Review Committee (KHRC ERC) approved the study ahead of its implementation.

Study results

Results of quantitative methods

At the end of data cleaning, a total of responses from 2,128 out of an estimated 2,641 sample of adolescents (80.6% response rate) were included in the analysis of data. These consisted of 1,415 (66.5%) females and 713 (33.5%).

1. Background characteristics of respondents

The findings below are based on information provided in table 1.

Close to two-thirds of both female and male respondents in the study area reside in rural communities. Well over four-fifths (83.3%) of adolescent females and a little under four-fifths (76.4%) of adolescent males have a primary education or higher. Close to a third of early adolescents (34.4% females and 33.1% males) have no education.

An overwhelming majority of adolescents remain unmarried, with about four-fifths (83.4%) of the female and close to all (96.7%) of the male population. 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 results seem to portray marital status to be related to age of the individual. For both genders, much more of the 15 to 19 year-olds as compared to 10 to 14 year-olds are married and living together.

2. Age at first sex, first marriage and first birth

Table 2 provides the backdrop to findings listed below.

The age at sexual debut/ first sex for those adolescents who have already engaged in sex ranges from 9 to 19 years of age and peaks at age 16 for both genders. Close to one fifth (18.3% females) and a third (29.2% males) of first sex occurred before and during the period of early adolescence.

Childbearing for female adolescents in this study began at 12 years and peaked at 17 years, whereas for males it began at 16 years with that age serving as the peak as well. An overwhelming majority of births among females occurred in the late adolescence period (92.8%), whereas all births in the males occurred in the late adolescence.

Female adolescents in this study began their first marriages from age 12 with a majority of marriages occurring by age 16 years. Male adolescents started their first marriages at age 14 years and also peaked at age 16. A little of over a tenth (12.7%) of female marriages occurred in the early adolescence period, whereas one-twenty-fifth (0.4%) of males got married over the same period.

3. Recent/lifetime sexual activity

Table 3 provides information on the lifetime sexual experiences of adolescents according to their age and marital status. The findings presented are based on information in this table.

Recent sexual activity in the case of this study implies activities occurring in the space of 4 weeks to the survey

Though a majority of them have never had sex, much more female adolescents have been sexually active as compared to their male counterparts (28% females versus 10% males). It is also worth noting that early adolescents of both genders (98.5% females and 98.6% males)

were much more likely not to engage in sexual activities as compared to their older peers (61.1% females versus 77.1% males). The previous finding is corroborated by the finding that females aged 15 to 19 years had been much more sexually active (18.8%) recently compared to 10 to 14 year-olds (0.5%) and males aged 15 to 19 (12.3%) compared to 10 to 14 year-olds (0.2%).

For both sexes, lifetime sexual activity varies by age and marital status. Whilst almost 40% of females with ages between 15 and 19 years had previously been sexually active, less than 2% of 10 to 14 year-olds had ever had sex. For males, the figures were 22.9% and 1.4% respectively. As might be expected, almost all adolescents who were married/living together, as well as those widowed, divorced or separated had previously been sexually active for both sexes. However, about 15% of never married females had been sexually active compared to about 8% of males.

4. Pregnancy and birth rates by age groups

Table 4 provides information of pregnancies and births among adolescents. Most pregnancies and births occurred within late adolescence with much more females being pregnant and having babies (16.7% and 11% respectively) as compared to males impregnating and fathering (2.8% and 1.4% respectively). Pregnancy rates (0.5% and 0.7%) and birth rates (0.5% and 0%) in early adolescence were low for both females and males respectively.

5. Not being ready for a pregnancy and being willing to accept help to prevent it

Findings in Table 1 describe adolescents who did not want to be pregnant and those of whom would have accepted help to prevent the pregnancy.
A little over a third of females (35.5%) who had ever been pregnant had not been ready for the pregnancy, compared to about a fifth (18.2%) of males. Almost all females with an unwanted pregnancy (33.1%) would have accepted help to prevent them, in contrast to half (9.1%) of their male counterparts.

Less than a half of females who were never married (44.7%) did not want their pregnancies and most of them (42.1%) would accept help to prevent the pregnancy. About a third of females who were married/ living together with their partners (34.5%) did not want their pregnancies and a majority (31.0%) wanted help to prevent it. A fifth of women (20.0%) who were widowed/ divorced/ separated did not want the pregnancy and close to a fourth of them (26.7%) wanted help to prevent it. Half of pregnant females (50.0%) who were not married but were sexually active in the last 30 days to the study did not want their pregnancy and over a third of them (37.5%) wanted help to prevent it. Close to a 40% of males coincidentally the married ones, who had impregnated a female did not want the pregnancy and a fifth of them (20.0%) would have accepted help to prevent it.

6. Knowledge of family planning methods

Table 2 presents information on the family planning knowledge of adolescents.
The knowledge of any method and modern methods of contraception were the same across the genders, age ranges and marital status. Females however were much more knowledgeable

(87.7%) than their male compatriots (82.0%). Knowledge of traditional methods of contraception was by far less in both females and males (48.6% and 33.9% respectively), but with females still ahead of the males. The younger adolescents, both female and male were less knowledgeable as compared to their older compatriots when it came to all forms of contraception.
Adolescents who had been in a form of relationship (married/ living together/ widowed/ divorced/ separated) had higher levels of knowledge as compared to the never married ones. Unmarried adolescents who were sexually active had the highest level of knowledge among the study participants.

7. Ever use of family planning methods

Table 3 shows those who have ever used family planning methods.
Contraceptive use of any method was generally higher among the older adolescents (24.9% in females and 14.1% in males) as compared to the younger ones (1.0% in females and 0.7% in males); and as is observed females did use much more contraceptives than did males.
Similar to the knowledge of contraceptive methods, adolescents who were in or had been in some relationships (72% and 75% in married/ living together female and male respectively; 52.2% and 100% in widowed/ divorced/ separated female and male respectively) did ever use contraceptives much more frequently as compared to those who were never married (8.6% and 3.8% in never married female and male respectively). Among those who were in some relationships, males seemed to have ever used contraceptives more than females.
Contraceptive usage among unmarried male adolescent respondents who are sexually active was slightly higher in males (56.5%) as compared to females (54.7%) as reported in (Table 7).

8. Current use of family planning methods

Table 4 provides information on females' current and intended to use, whereas for males it is about their most recent use and knowing where to access FP methods.
By age groups, older adolescents' current use of FP methods (12.9%) was greater than that of the younger ones (0.0%). Considering those in relationships, current use of FP methods in females who were married/ in relationships was highest (38.3%), followed by those not married but recently sexually active (31.4%), the widowed/ divorced/ separated (21.7%) and least being the never married (4.2%). The use of a FP method at the last sexual encounter among female adolescents followed the same pattern as that for current use of the methods.
A greater proportion of older females stated their intention to use FP methods in the future (59.9%) as compared to their younger colleagues (38.3%). Widowed/ divorced/ separated females were most intent on using FP methods in the future (87.0%), followed by those not married but recently sexually active (75.6%), those who were married/ in relationships (71.5%), with the never married female adolescents (50.8%) being least intent on using the method in the future.
The older adolescent male cohort knew more about places they could access condoms (71.5%) than their younger compatriots (40.8%). Widowed/ divorced/ separated male adolescents and the not married but recently sexually active tied (100.0%) as those who most knew where to get condoms, followed the married/ in relationships (85.0%) and least the never married (52.1%).
About a fifth (12.0%) of the older male adolescents used a FP method at their last sexual encounter as compared to 0.2% of the younger ones. All of the widowed/ divorced/ separated

(100.0%), a little under two- thirds (60.9%) of the not married but recently sexually active, half of the married/ in relationships (50.0%) and 3.3% of the never married in that order used a FP method at their last sexual encounter.

9. Family planning method used at most recent sexual activity and preferred method for future use

Table 5 shows the distribution of FP methods used at last sex and preferred future Family Planning method.

An overwhelming majority of adolescent females (41.1%) used no FP method at their last sexual encounter, followed by the male condom (20.9%), the rhythm method (16.6%) and the pill (13.8%). Methods that were less used among females were the injectable (3.6%), withdrawal method (2.4%) and the female condom (0.4%).

In the case of male adolescents, majority used the male condom (65.1%) and a quarter of them (25.1%) used no method at all. The rhythm method, female condom, male sterilization and the pill were used by 2.3% each of male adolescents.

The future FP method of choice for most females was the injectable (35.2%), followed by the pill (20.6%), no method at all (19.4%), male sterilization (9.9%) and the male condom (5.9%) occupying an abysmal fifth position in their list of preferences. Other less favored preferences were the IUD (2.0%), female condom (0.8%), diaphragm (0.8%) and the foam or gel (0.4%).

Recommendation: This possibly means young females would have preferred other options other than the male condom had they gotten the opportunity and as such these should be made available and accessible to them.

10. Sources of family planning information

Table 6 presents the sources of family planning information adolescents assessed in the last few months.

The radio was the main source of information on family planning for close to a third of both female and male adolescents (29.1% for females and 30.1% for males). The television (19.9% females and 15.4% males), socializing (19.1% females and 10.7% males) and reading from posters (10.2% females and 10.5% males) followed as sources of information for both genders. For females, magazines were the least source of information (3.8%) followed by shops (7.1%), whereas for men it was shops (3.9%) that were the least informative followed by magazines (4.2%)

Socializing in the context of this paper for females was taking part in activities such as fetching of water from outside the compound, going to farm or market, visiting the hairdresser or the seamstress. Socializing for males included playing indoor games like draught, ludo and oware or visiting alcohol drinking spots in the community.

Recommendation: Aim family planning messages through the electronic media as well as using peer group approaches. Access preferred sources of information in this population as well.

11. Importance of family planning to health and well being

Table 7 describes adolescents' views of the importance of FP services.

On the whole, with the exception of younger adolescents and in a few instances the never married, more than half of each category of study participants agreed on the importance of family planning 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.

12. Perceptions of family planning use

Table 12 summarizes the perceptions adolescents have with respect to family planning and some social issues.

With the exception of females who were married/ living together with their partners (57.5%), most respondents of both genders were of the view that FP is not the responsibility of women alone.

Unmarried but recently sexually active males (78.3%) and widowed/ separated/ divorced females (65.2%) were the most who did perceive FP as making women promiscuous.

A majority of study subjects perceived having many children as dangerous to a woman's health (71%), thought it was better not to have many children (84%) and were of the view that smaller families were more likely to succeed in life (76%).

Results of qualitative methods

Based on the objectives of this study, the qualitative arm was first to access perspectives of society and healthcare providers on family planning care delivery to adolescents. Such perspectives were to provide a fair idea of what the community and healthcare providers' perceptions of and how they would respond to family planning care being provided to adolescents. Secondly, the qualitative arm sought to assess how best adolescents' family planning needs could be addressed.

A total of 16 qualitative interviews were performed by the research team consisting of 2 FGDs with opinion leaders in the various communities, 3 FGDs with adolescent, 4 IDIs with opinion leaders of the communities and 7 IDIs with health workers linked to family planning service delivery to the communities.

Adult respondents to the various interviews consisted of opinion leaders in the communities and healthcare providers linked with family planning service deliveries in the communities. Opinion leaders coincidentally were all males with healthcare providers on the other hand made up of both genders. The ages of the adult respondents ranged between 31 and 79 years. Adolescent females ranged between 13 and 17 years, whereas their male counterparts were between 13 and 19 years.

The level of education of the adult population involved in the study was quite varied: there were those with no formal education, others with Middle School Leaving Certificates (MSLC), Junior High School (JHS) certificates and diplomas. The adolescent population was currently in school, ranging from primary school class 6 to JHS form three (3).

Study participants were predominantly of the Bono and Mo ethnic groups that reside in the Kintampo North Municipality and the Kintampo South district in the middle belt of Ghana. There was however a minority of study participants from migrant ethnic groupings of the Northern Region of Ghana for example that reside in the communities.

Themes that emerged from analysis of the interviews with respect to **perspectives on family planning care delivery to adolescents** were as follows:

- Prevention of and reduction of unwanted teenage pregnancies is a good thing to do
- Family planning could help adolescents achieve greater heights
- Adolescents experience obstacles in accessing family planning services
- Family planning is not good for adolescents as they could be corrupted by the knowledge to become promiscuous
- Perceived complications of family planning methods
- Adolescents need to be introduced to varied family planning methods

Themes that emerged from analysis of interviews with respect to **how best to address the family planning needs of adolescents** were as follows:

- There is the need for education of communities and adolescents as to the benefits of family planning
- There is the need for education of communities and adolescents on available and accessible family planning methods
- There is the need for commitment to family planning from the state
- Societal traditions and customs should revamped/ reinstituted to facilitate family planning interventions
- Religious leaders have a role to play in acceptance of family planning services
- Family planning services should be free and readily accessible
- Educating to change poor healthcare provider attitudes

The above themes are further discussed below:

I. Perspectives on family planning care delivery to adolescents

1. Prevention of and reduction of unwanted teenage pregnancies is a good thing to do

Community representatives, health workers and adolescents were of the view that an adolescent engaging in family planning was good. This is depicted in some quotes from the various interviews and FGDs below:

emm if you see for instance that your young daughter always gets pregnant without knowing the person responsible, maybe she is mentally ill, when that happens the family members can come together to do the family planning for her because if not, at the long run it will become a burden on you the parent (Community Representative, FGD-R8, Anyima).

That is what I said earlier, some of these students get pregnant but when they do family planning, it will reduce teenage pregnancy. It helps to prevent teenage pregnancies (Female Health Worker, IDI Amoma).

It is good we introduce it to them (young people) because the person will not abstain from sexual relationship because he or she is young so once they are already doing it they would have to do family planning to avoid teenage pregnancy. Sometimes a young man impregnates someone and runs away from the community and because the girl does not want anybody to

know she is pregnant, she tries all means to terminate the pregnancy and this brings a lot of problems. (Male health worker, IDI, Babator)

An adolescent using family planning is good…The benefit is that when an adolescent uses family planning it will protect her from unwanted pregnancies and even though not all the methods prevent STIs some can help protect them from STIs. For instance both the male and female condoms can protect them from getting STIs including HIV AIDS…When it is put into their curriculum ant teach them at school, they will benefit a lot from it. They will know the uses and then the dos and don'ts about family planning. (Female_1 Health Worker, IDI, Babator)

It helps prevent teenage pregnancy (adolescent FGD- R8 Anyima).

2. Family planning could help adolescents achieve greater heights

Community representatives, health workers and adolescents do agree that family planning could facilitate adolescents achieving their ambitions of life, such as completing school, learning a trade, etc. Their views are shared in some selected quotes below:

That (FP) will help the person to achieve her aim whether you are attending school or learning a trade. May the person does not want destroy her future; if she does not go for family planning she could get pregnant and that will prevent her from achieving her aim (Female Opinion Leader, IDI, N.Longoro).

Yes some of them are learning trade and others are schooling. At the end of the day those who are able to do the family planning are able to finish their trade successfully and start work but those who do not do the family planning gets pregnant along the line and abandon the trade. Here the man will not marry her and her trade is abandoned as well. Students who do family planning are able to further their education. (Male Health worker, IDI, Babator)

In my opinion I think it's very good because it will help in the development of the country and reduce poverty. Like maybe if you are about fourteen years old and you give birth you can't continue your education again (adolescent, FGD- R8 Anyima).

3. Adolescents experience obstacles in accessing family planning services

Study participants identified some issues that served as obstacles to adolescents accessing family planning services. These include:

a. The community views adolescents engaged in the process as bad/ spoilt kids.

A lot of them are not good (spoilt) and they don't protect themselves. Some of them even get pregnant whilst at school (Female Opinion Leader, IDI, N. Longoro).

so I see is that a lot of them when they decide to do the family planning especially the young ones they think that they will be perceived as been bad children by the health workers, some of the young ones when they even see that her colleague have given birth then she also wants to give birth, and here too when one delivers then they come with nice gifts, buckets and some

other things, so the others also try to follow suit by getting pregnant (Opinion leader, FGD-R4 Anyima).

b. The cost of accessing family planning services prevents some adolescents from going for them

emm! Some are financial problem, if someone wants to do family planning he may be thinking about the cost, maybe she might not have the money to do it, for family planning you need not to be sick before you do family planning, so I believe if someone really wants to do it she can walk to pick a car and go, because we even walk a long distance to go to market, so I think the distance is not really a problem but then the money is the issue (Opinion Leader Dwere).

Sometimes they don't have money to pay for and because they feel shy they don't ask their parents for money. You know sometimes when they reach the adolescent age they feel shy to ask about FP services...other than that they won't have any problem (Male Opinion Leader N. Longoro).

c. Judgmental attitudes of and discrimination by health care providers

Some of the challenges are that, the Health worker can advise you the adolescent that you are not old enough and that when you do it (family planning), you will be practicing prostitution. (Adolescent FGD-R1 Amoma)

The problem they face is that, when you want to do it, someone could ask if you have a husband or a boyfriend. They feel shy to go and do it because you will be asked a lot of questions about why you want to came and do it. The questioning could prevent them from going for family planning (Opinion Leader, IDI, Babator).

For me, if only it will be possible, if he (young person) goes to access FP, the nurse there should sit down with him and explain to him that at that age, he should take away his attention from it (sex) (Male health worker, IDI, Anyima).

When you a child and you go to the drugs store that you need some of the family planning drugs, they will mistreat you and brand you as a spoilt child (adolescent R8 Anyima).

They (adults) usually see (view) such a (young) person as a prostitute who does not want to give birth, just because she wants to continue his or her prostitution. (adolescents R Amoma)

When the family planning people come, it is the married that they talk to but they don't see the unmarried but they are the important group (Opinion Leader Babator).

d. Adolescents feeling shy to come forward for family planning care

At times we adolescent too sometimes we are shy to go to the Health worker to do family planning. (Adolescent FGD- R1 Amoma)

Shyness, I think it's shyness for someone like me to walk emm to a drug store to buy a condom, ehaa, but others go with the name of their elder brothers or sisters that they have been sent by them, hahahaha(Laughter) (adolescent FGD- R2 Anyima)

e. Health workers not abiding by the rules of confidentiality

Even if the health worker does it (family planning) for you then the health worker will go and sit somewhere and tell others that this person is a spoilt child and that is just because you went for family planning services. (Adolescent FGD, R3 Amoma)

Sometimes if you have a boyfriend or a girlfriend that your parents are not aware of and you decide to go and do family planning; the Health worker will go and tell your parents. (adolescent R5 Amoma)

f. Some respondents however were of the view that healthcare providers performed their roles credibly, probably motivated by some incentives

They are received nicely because looking at the life the person is living, you have to do it for the child in order that they don't go and bring problems to their parents. So the children are received nicely the same way the adults are received (Female Opinion Leader N. Longoro).

What I have to say is that the service providers are doing their job effectively...because of that I see that teenage pregnancies have reduced in the community. You know when they go to talk to them, they sit down quietly and listen but they don't show it outwardly what they think... You know...this FP thing ...they do it privately...so I can't comment on that (Male Opinion Leader N. Longoro).

They are very emm receptive because, they know that they will get their money from them (adolescent R6 Anyima)

4. <u>Family planning is not good for adolescents as they could be corrupted by the knowledge to become promiscuous</u>

a. Some respondents were of the view that family planning could corrupt adolescents and make them promiscuous instead of protecting them.

With us we perceive that person as a fornicator, because he is not married (Community representative, FGD-R4 Anyima).

They (the community) will see the person (engaged in family planning) as a spoilt child, because until you decide to sleep with men you won't think of doing family planning. Why would you go in for family planning; what for? So we will see the person as a bad boy or girl because why would you go in for family planning when you are not ready for marriage or give birth. For me I see the person as a spoilt child. (Female Opinion Leader, IDI, N. Longoro).

That FP education is rendered to children.... adolescents.... as for me.... sometimes it baffles me in that through that opportunity the children are exposed to a lot of things but in end they are

told not to practice them.... but as a child once you have taught him/her he will do it. So, for me, once the fellow is not up to the age...in my opinion, there is no need to teach him those things... For me, it should stop…when you render the education...the demonstrations that you will do.... in the course of educating, discloses certain things, you see? You see.... sometime ago, we went.... druggists went for a workshop concerning this very condom. When we went, they had carved a certain stick (laughs) exactly like our manhood and with that, they demonstrated how to wear a condom and after you have finished doing your own thing how you can remove it, you see? So if you go to stand in front of that 10 to 19 year old child to teach this, it will even draw the attention of the child to the thing, you see? So, for me.... this kind of education.... if the fellow is not up to the age of marriage, let us not teach them things like that.... that's my opinion as an individual. (Male health worker, IDI, Anyima).

b. Some respondents were of the view that in spite of perceptions of promiscuity by young people using family planning; there was the need to prevent maternal deaths

Errm…some people are saying that will make them (young people) more promiscuous...but there is nothing you can do about it. We want to prevent maternal death…so if you tell the child not to go (for sex) and she is going, then just protect the child and then for him or her to live longer…so… (Female health worker, IDI, MHMT)

They (community elders, when young people use FP) see that you are grown or matured or they see you to be bad (adolescent FGD- R7 Anyima)

They (community elders, when young people use FP) see that their children are flirting around with men…. (adolescent FGD- R5 Anyima)

5. <u>Perceived complications of family planning use</u>

Family planning was thought to result in complications with adverse effects on health

that is what we first talked about, may be the person might have heard that a colleague have had complications due to this family planning for instance may be a swollen of one bottoms which has rendered the person disabled, or some even get heart diseases or feel dizzy when they take the injection. So these and some other emm things discourage the young ones from engaging in family planning (adolescent FGD-R1 Anyima).

It is not good because the time that you will be ready for a child you cannot get pregnant (Adolescent R4 Anyima).

6. <u>Adolescents need to know the varied family planning methods and the limitations of each</u>

The perception that family planning protects persons engaged in them was the concern of some respondents. They were of the view that family planning seemed to provide an erroneous sense of security to young people, and as such they need to be educated as much as possible on its diverse forms and limitations.

My view is that family planning is good but we have to be cautious…We tell them (adolescents) that if they can abstain from sex, then they do not need family planning. The fact that you have

done the family planning does not mean you have protected yourself against HIV/ AIDS, because family planning is not only condom and the other method does not protect you against other sexually transmitted diseases. So whilst we educate people on family planning, we have to tell them about the STIs… Especially the young girl as soon as they do the family planning they think it is all over; they can do whatever they want. (Male health worker, IDI, Babator)

You can't ask adolescents not to do family planning because they will involve themselves in sexual activities. Sometimes they can get infections when the contraceptive method is not used well. HIV for instance is not prevented by the insertion of the "gyader" and IUD. In a way, yes (adolescents get spoilt by exposure to FP) but because we are in a computer age it is advisable you expose them to the various methods so that whenever they need it they can have access to it. (Female Health Worker, IDI, Babator).

II. How best to address the family planning needs of adolescents

1. <u>There is the need for education of communities and adolescents as to the benefits of family planning</u>

Education of the community was seen as a means to get them to understand family planning and to reduce teenage pregnancies.

Mmm..... what I will say is that Nananom (chiefs and elders) should add it to their culture, whenever it is time for a social activity they should pay attention to the youth by way of advice, yes. So that if for instance he is even meeting the people to think about the community, there should be a slot for the youth and here an expert in FP could be invited to address the youth. Like you have said, it is not only about medicines.....protection.....he should be allowed to address the youth even before the main program comes on. That means whenever Nana meets the community he should slot in that education. I believe that something like that can help. (Male health worker, IDI, Anyima).

We have to get someone to tell our parents that family planning is good or not. My mother for instance does not know whether it is good or not so if I tell her I am going for family planning, she will agree because may be I told her the good side of it but it may turned into a different thing at the end; if you ask such a person she will say that she informed her mother and the mother asked her to go and do it but it because the mother didn't know of the negative effects (adolescent FGD-R6 NL).

Now we have information service center here in this community, so I think the mid- wife can use that opportunity to come on air to educate the entire community members about family planning (community representative, FGD-R8 Anyima).

We need to talk to them say the school children and explain to them the benefit of family planning; it all about talking to them (Female Health Worker, IDI Amoma).

A health worker gave an example of a case where education had made a change in their community.

I think it's all about talking to them. For instance the dargattis in this town used not to circumcise their male children but upon talking to them, some of them have started doing it. They said their

culture forbade it but we have talked to them and some of them are now coming. The taboos transmitted to them by their fore fathers are there but if you explain it to them, they will understand (Female Health Worker Amoma).

2. <u>There is the need for education of communities and adolescents on available and accessible family planning methods</u>

Study participants were of the opinion that the communities should be educated on FP methods available and accessible to adolescents.
At gatherings announcements could be made about family planning, where you can get access to it; may you can get family planning at the hospital or this or that pharmacy or drug shop and it is free. It will reduce unwanted pregnancies (Female Opinion Leader, IDI, N.Longoro).

The family planning drugs are plenty in the system and I have never heard of shortage but for people to understand and do the family planning is a problem. They do not know why they should do the family planning so we have a lot to do. If possible, we should go into the communities, gather people and talk to them about the benefits of doing the family planning, radio announcements and one on one education. The numbers of people who know about it are really small and education and publicity is minimal. (Male health worker, IDI, Babator)

I think we should educate people on family planning so they could go to the drug stores and the clinics and the health centers so that when you need one you could easily go there for one…(adolescent, FGD- R8 Anyima)

3. <u>There is the need for commitment to family planning from the state</u>

Some adolescents saw the need for government to commit to family planning programs through infrastructural developments and the enactment of legislations.
We appeal to the government to come and establish a hospital that does Family Planning Services or the government should bring equipment to enable the Health Centre to be doing it (adolescent, FGD- R4 Amoma)

I think it mostly rest on the government, if the government is really serious to help these young ones then he should be able to make the drugs available at lees or no cost at all, because somebody might be interested in it but may not have the money to pay, so that is what the government can also do to emm help (R1 Anyima).

There should be a law that if you are not up to a certain age to access Family Planning services, then you should abstain from sex (adolescent, FGD- R4 Amoma)

That the government should make it (FP) compulsory (adolescent, FGD- R8 Amoma)

4. <u>Societal traditions and customs should revamped/ reinstituted to facilitate family planning interventions</u>

Study participants were of the view that the reinstitution of traditional values and rites of entry into adulthood could go a long way to enhance family planning use among adolescents and so doing reduce unwanted pregnancies.

I think the queen mother should be firm to reinstate the puberty rites which was formally practiced and should sacrifice a sheep to perform rituals for all those who go contrary to the rules of the rites, in this way it will scare others from becoming pregnant. Also they (chiefs and elders) should at such gatherings to explain to the other young ones around on the need to remain chaste before marriage (community representative, FGD- R4 Anyima).

'Kyiribra' (puberty rites) if they bring it back it will scare the young ones from getting pregnant so they will resort to using family planning (adolescent, FGD- R7 Anyima).

5. Religious leaders have a role to play in acceptance of family planning services

Some respondents suggest that religious leaders in the communities should be made to take on roles to create awareness and acceptance of family planning

Also I think we the Muslim leaders should educate our children about the consequences of teenage pregnancy, ii will emm also help a lot (community representative, FGD- R3 Anyima)

On the issue of traditional norms what I can say is that, in our community when we say someone is a leader, the rest of us follow him without challenging him. For example a religion like Islam, if the leaders could talk to their people for them to understand the family planning, they will also tell others about it. It is the leaders who will talk against it but if they don't do that, to their people it means the thing is good. The same can be done for the traditional healers; we should form an association for them so that we can talk to them about family planning. (Male health worker, IDI, Babator)

On the role of religious leaders, others were of the view that religious leaders could not do much once the community members were entrenched in their beliefs

The Muslims do not like it so I don't think an Imam or a muslim leader will encourage his people to go into family planning (Opinion Leader, IDI, Babator).

Once it is their belief you can't influence them...The only thing you can tell them (Catholics) is to use the natural methods and you council them to improve on the natural methods; maybe because of HIV you can ask them to use condoms. (Female_1 Health Worker, IDI, Babator)

6. Family planning services should be free and readily accessible

Free and readily accessible services were seen by respondents as a facilitator to family planning programs.

eih! I think with the advent of health insurance we receive free medical care so if it will be possible it should be captured in the health insurance so that all those insured could access family planning that is also what I can say (Opinion Leader, IDI, Dwere).

Accessible...Hmm…this one I think…hmm...the availability, it should be available...yes, then it should be free...if it is available and then it's free they (adolescents) will go and take it... (Female health worker, IDI, MHMT)

I think like the condoms and the other drugs they emm… Should reduce the prices to make it very cheap like even one pesewa so that every young person can afford to buy one to protect him/herself. (adolescent R1 Anyima)

There was this observation that with maternity services being made free of charge and people made to pay for FP services, there was an incentive to have more babies instead of practicing FP.

What I have noticed recently is that if you are pregnant and you go to the hospital, you don't pay money for treatment. This is quite difficult. But you do pay for family planning (Female Opinion Leader, IDI, N. Longoro).

7. Educating to change poor healthcare provider attitudes

The need for health workers to change their approach to adolescents was an issue raised in the study.

The nurses too should keep the secrets between those who come to do Family Planning. This will also help because if someone goes to do it and she tells her friend and it is kept a secret then it will encourage them (adolescents) to go and do it (adolescent FGD- R Amoma)

maybe if err…our health workers also change their attitude…for example...a care provider addressing an adolescent…"ei...you this little kid…what are you using family planning for?" … So we should be receptive, that too. I know in my former district, I had to insert Gyader on 3 SS girls...the girls were brilliant, I did it myself...3, now they are in the university (Female health worker, IDI, MHMT)

8. Role of parents and elders of the community

Parents' role cannot be underestimated in adolescent's use of family planning services. Their support for their children could enhance their use of the services.

just as we were discussing at the beginning, all will depend on the good parenting that we will give to our children, for instance if you have invested expensively in your child's education you would do all that you can and even advise her to do the family planning, because you can't force her not to have sex with a man, so you have to adopt this strategy to protect her (community representative, FGD- R1 Anyima).

I think it also depends on the sort of relationship that exist between you and your child, some of the children fear their parents to the extent that they can't discuss family planning matters with them likewise some parents (community representative, FGD- R3 Anyima).

there is a saying that 'a child whose future is bright you would know' so if you see such children you should advise them because you can't say that she would never have sex with a man,

however there are others whom their parents don't even know their where about the next and the next moment you see them they are pregnant (community representative, FGD- R5 Anyima).

Discussions

In this study, close to a fourth (19.1%) of females aged 15 to 19 years were married/ living together (in relationships) as compared to 6.7% of males of the same age group. These rates are higher than those in an earlier study among adolescents in Ghana, in which 7% of females were in relationships as compared to 1% of males. Less than 1% (0.4%) of female adolescents and 0.2% males aged 10 – 14 years were in relationships as compared to none in the earlier mentioned study [14]. According to the 2008 Ghana demographic and health survey (GDHS), 8.3% of females and 0.7% of males aged 15 – 19 years were in relationships. Marital rates among adolescents in the study population seem to be higher than rates observed in earlier studies in the study population nationwide.

In an earlier study among Ghanaian adolescents and the 2008 GDHS, females experienced first sex earlier than males in contrast to the current study where first sex began at an earlier age with much more males becoming sexually active earlier in life than females [14, 16].

The 2008 GDHS showed that teenagers and unmarried women among others were less sexually active in the four weeks prior to the survey. In that same survey, the proportion of women frequently sexually active increased with age as was the case in the current study with older female adolescents being much more active than their younger compatriots [14, 16]. As in the current study, females in the study by Awusabo-Asare and colleagues were much more sexually active than the males both recently and over the lifetime [14].

As was determined by the 2008 GDHS, pregnancies among teenagers increased with increasing age in this study as well. In the study by Awusabo-Asare and colleagues, less than 1% as compared to close to 3% in the current study of adolescent males had made a female pregnant. Among the females in that study, 13% had ever been pregnant and 9% had had a baby, whereas in the current study 16.7% had been pregnant and 11% had babies [14]. The above depicts higher pregnancy and birth rates among adolescents in the study community compared to the national figures.

An overwhelming majority of female and a sizeable proportion of male adolescents in this study who had unwanted pregnancies would have accepted help to prevent it, a situation that calls for the need to provide some more support to this cohort.

The knowledge of at least a contraceptive method and modern contraceptive methods among the study population was high, similar to the study by Awusabo-Asare and colleagues [14]. Knowledge of the traditional methods however was not that high. Older adolescents in both studies were more knowledgeable than their younger peers. Knowledge also seemed to increase with age in both genders of the population; however adolescents in relationships were more knowledgeable than those not in relationships. In the 2008 GDHS, sexually active

unmarried females had the highest level of knowledge of contraceptive methods, but in the current study females and males were equally knowledgeable.

In the current study, older adolescents used more contraceptives than their younger colleagues. Females also ever used much more than their male counterparts as was observed in a study among Ghanaian adolescents [16]. The trend was however different among the unmarried but sexually, where males used much more than females. Adolescents in relationships also used more contraceptives as compared to the never married. In the 2008 GDHS, unmarried but sexually active females and males ever used contraceptives much more frequently than any of the other cohorts, but males did use more than females.

In the 2008 GDHS, adolescents were shown to have used contraceptives during and at the time of the survey; however unmarried sexually active females were seen to by far use contraceptives than any of the age cohorts.

In the current study, a high proportion of females as compared to males never used a contraceptive method at their last sexual encounter. The male condom was however the most used family planning method followed by the rhythm method among both genders. A high male condom usage was determined by a study of Ghanaian adolescents as well [16]. With respect to future choices of contraception use among females, hitherto less used methods like injectables and the pill assumed pride of place with the male condom becoming the least preferred method.

The electronic media (radio and television) were the most prominent sources of family planning information for adolescents in the current study. Socializing was the next best source of family planning information. A Ghanaian study among adolescents portrayed the dominance of radio and television as a source of FP information, but highlighted other sources such as teachers and peers [14], that were not mentioned in the current study.

The general assertion by respondents in this study was that FP plays an important part in the health and well-being of individuals. It is important to address the younger adolescents' and never marrieds' less favourable view of family planning's importance in the health and well-being of people.

Adolescents generally did view family planning in a positive light. It is however necessary to address the perceptions such as FP fuelling promiscuity and the likes among certain groups of adolescents.

Limitations to study

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

Conclusions

The study set of to address four objectives. The following summarizes the study findings based on the set objectives.

With respect to the FP needs of adolescents, marital rates among adolescents in the study area were above nation al figures. Adolescents initiated sex earlier in the study population with more males becoming sexual active ahead of their female counterparts contrary to previous study findings. Female adolescents in the study population were sexually more active than males in the short and long term prior to the study. Both adolescent females and males in the current study who had been pregnant or had impregnated before would have wished for help to prevent the pregnancy. Pregnancy and birth rates in the study population were higher than those found in earlier studies in Ghana. Contraceptive knowledge and current use was less among the younger adolescents, and considering their higher marital, pregnancy and birth rates, much more needs to be done to make services accessible to them. This concern was amplified in the qualitative arm of the study held with community representatives, health workers and adolescents in this study. Adolescents in the current study mostly used the condom followed by the rhythm method, however the future preferences of females such as injectables and pills points to gaps in accessibility. The obstacles to FP care mentioned during the qualitative arm of the study seem to explain the reasons behind the gap.

On the issue of FP's importance to health and wellbeing, most adolescents responded in the affirmative; younger adolescents were however in the minority with respect to that view. Younger adolescents' view might be due to their level of understanding and appreciation of FP as they have generally lagged behind their older compatriots with respect to FP knowledge and use. Most adolescents in the current study did not view FP as the business of the woman. Some groups of adolescents saw FP as leading to promiscuity amongst adolescents, which does not augur well for getting them onto the program. Majority of the study population saw having many children as dangerous to the health of the mother and were of the view that it was better to have fewer children- a situation that could encourage them to engage in FP.

Study subjects perspectives on FP delivery to adolescents were identified in the qualitative arm of the study. There was the general notion that family planning was good and had several benefits for adolescents, though there were few respondents who thought otherwise. Adolescents were said to meet many obstacles in their quest to access FP care, including poor attitudes and discrimination from care providers, the community seeing adolescents practicing FP as spoilt, the perception that FP could corrupt the young population, concerns about healthcare worker approaches to care delivery and perceived complications of FP.

Study respondents during the qualitative arm of the study had some suggestions on how best to address FP needs of adolescents. They mentioned educating the community on how to access FP services, the benefits of its use, the need for commitment from state institutions to FP care delivery, revamping traditional norms preventing teenage pregnancy, religious leaders and parental involvement, encouraging healthcare provider attitudinal change and providing information to adolescents about the varied forms of FP and limitations of each form.

Recommendations

The following stakeholders in the provision of FP care to adolescents were provided the following recommendations.

Care providers- There is the need for a change in attitudes and practice tenets to adolescents. Care providers require education on the needs of adolescents and how to best approach care delivery to them.

Community- The community requires a change of attitude towards FP care to adolescents, see it not only as a program for the married. Community opinion leaders, religious leaders, chiefs and elders should be at the forefront of educational programs to change public perceptions. These leaders should facilitate programs leading to the reinstatement of traditional customs that discourage teenage pregnancies.

Health care policy makers- Consideration should be given to education of adolescents and the community as a whole about FP services, their availability and accessibility. There should also be education to de-stigmatize FP care to adolescents and provide information on its benefits. There should be a focus on educating healthcare workers about their responsibility to adolescents and put in mechanisms to ensure that they provide the appropriate services to their charges. For effective implementation of FP programs to adolescents, resources required should be availed to program implementers.

Political leadership/ policy makers- Study respondents wish for legislations encouraging FP services to adolescents and showing commitment to FP by providing resources to enhance care delivery.

Toward practice- Expand the provision of FP care to adolescents at risk of pregnancy. Make accessible to adolescents varied forms of FP methods. Enhance education to younger adolescents on FP methods, their benefits and limitations, so they can make informed choices based on their needs. Program implementers should continue information dissemination on FP via electronic media outlets targeting adolescent populations.

Towards future research- This study has shown a higher level of marriage, pregnancy and delivery among adolescents in the study communities. Such focused studies in other communities should be engaged in focusing on adolescents to identify their situation. Implement a research into the claim that FP use by adolescents leads to promiscuity to address this concern.

Tables

Table 1: Background characteristics of respondents

	Female %			Male %		
	10 – 14 n= 413	**15 – 19 n= 1002**	**10 – 19 n= 1415**	**10 – 14 n= 429**	**15 – 19 n= 284**	**10 – 19 n= 713**
Place of residence						
Rural	69.1	62.3	64.3	69.8	69.1	69.5
Urban	30.9	37.9	35.7	30.2	30.9	30.5
District of residence						
Kintampo North	59.3	62.2	61.3	61.1	60.9	61.0
Kintampo South	40.7	37.8	38.7	38.9	39.1	39.0
Current educational attainment						
No education	34.4	7.7	15.5	33.1	6.7	22.6
Primary	63.9	57.9	59.6	63.9	68.3	65.6
JHS & higher	0.5	33.3	23.7	1.9	24.3	10.8
*Missing	1.2	1.1	1.1	1.2	0.7	1.0
Marital status						
Married	0.2	2.1	1.6	0.0	1.1	0.4
Living together	0.2	17.0	12.1	0.2	5.6	2.4
Divorced	0.0	0.3	0.2	0.0	0.4	0.1
Separated	0.0	2.0	1.4	0.0	0.4	0.1
Never married	97.8	77.4	83.4	99.5	92.3	96.6
Missing	1.7	1.1	1.3	0.2	0.4	0.3

*Missing- Missing values

Table 2: Distribution of age at first sex, first birth and first marriage relative to current age

	Age at first sex %		Age at first birth %		Age at first marriage %	
	Female n= 389	**Male n= 65**	**Female n= 112**	**Male n= 4**	**Female n= 221**	**Male n= 25**
9	0.3	3.1	0	0	0	0
10	0.3	7.7	0	0	0	0
11	0	3.1	0	0	0	0
12	1.8	9.2	1.8	0	1.4	0
13	5.4	1.5	1.8	0	4.5	0
14	10.5	4.6	3.6	0	6.8	4.0
15	25.4	13.8	8.9	0	24.0	32.0
16	26.4	18.5	21.4	25.0	28.5	24.0
17	18.5	23.1	22.3	0	17.2	24.0
18	8.7	13.8	23.2	50.0	14.5	16.0
19	2.3	1.5	17.0	25.0	3.2	0
Median age	**16**	**16**	**17**	**16**	**16**	**16**

Table 3: Distribution of lifetime sexual experience by gender, age and marital status

	Female %				Male %			
	Never n=1019	**Recently n= 190**	**Not recently n= 206**	**Total n= 1415**	**Never n= 642**	**Recently n= 36**	**Not recently n= 35**	**Total n= 713**
Age								
10 – 14	98.5	0.5	1.0	413	98.6	0.2	1.2	429
15 – 19	61.1	18.1	20.2	1,002	77.1	12.3	10.6	284
10 – 19	*72.0*	*13.4*	*14.6*	*1,415*	*90.0*	*5.0*	*4.9*	*713*
Marital status								
Never married	84.7	7.3	8.1	1,180	92.7	3.3	3.90	689
Married/ living together	0.5	50.8	48.7	193	5.0	65.0	30.0	20
Widowed/ divorced/ separated	4.3	21.7	(3.9	23	0.0	0.0	100	2
Missing	94.7	5.3	0	19	100.0	0.0	0.0	2
Total	*72.0*	*13.4*	*14.6*	*1,415*	*90.0*	*5.0*	*4.9*	*713*

Table 4: Pregnancy and birth rates

	Female % **Ever been pregnant** **N= 171**	**Ever given birth** **N= 224**	**Male %** **Ever impregnated** **N= 22**	**Ever fathered** **N= 8**
Age range				
10 – 14	0.5	0.5	0.7	0.0
15 – 19	16.7	11.0	2.8	1.4
10 – 19	11.9	7.9	1.5	0.6

Table 5: Adolescents who have ever been unprepared for pregnancy and would have accepted help to prevent pregnancy relative to age, marital status and unmarried but recently sexually active

	Female % **Not ready for pregnancy** **N= 120**	**Accept help to prevent pregnancy** **N= 112**	**Male %** **Not ready for pregnancy** **N= 4**	**Accept help to prevent pregnancy** **N= 2**
Age range				
10 – 14	50.0	50.0	0.0	0.0
15 – 19	35.3	32.9	25.0	12.5
10 – 19	35.5	33.1	18.2	9.1
Marital status				
Never married	44.7	42.1	0.0	0.0
Married/ living together	34.5	31.0	40.0	20.0
Widowed/ divorced/ separated	20.0	26.7	0.0	0.0
Total	35.5	33.1	18.2	9.1
Recently sexually active but unmarried	50.0	37.5	0.0	0.0

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

Table 6: Adolescents who have ever heard of family planning by age, marital status and unmarried but recently sexually active

	Female %			**Male %**		
	Heard of any method N= 1241	Heard of any modern method N= 1241	Heard of any traditional method N= 688	Heard of any method N= 585	Heard of any modern method N= 585	Heard of any traditional method N= 242
Age range						
10 -14	72.6	72.6	17.2	73.4	73.4	17.9
15 – 19	93.9	93.9	61.6	95.1	95.1	58.1
10 – 19	*87.7*	*87.7*	*48.6*	*82.0*	*82.0*	*33.9*
Marital status						
Never married	86.8	86.8	43.8	81.7	81.7	32.4
Married/ living together	99.0	99.0	78.8	95.0	95.0	85.0
Widowed/ divorced/ separated	100.0	100.0	78.3	100.0	100.0	100.0
NK/ NA/ Missing	15.8	15.8	5.3	2.0	2.0	0.0
Total	*87.7*	*87.7*	*48.6*	*82.0*	*82.0*	*33.9*
Recently sexually active but unmarried	100.0	100.0	84.9	100.0	100.0	78.3

Table 7: Adolescents who have ever used family planning by age, marital status and unmarried but recently sexually active

	Female %			**Male %**		
	Used any method N= 253	Used any modern method N= 194	Used any traditional method N= 159	Used any method N= 43	Used any modern method N= 39	Used any traditional method N= 19
Age range						
10 -14	1.0	0.7	0.7	0.7	0.5	0.2
15 – 19	24.9	19.1	15.6	14.1	13.0	6.3
10 – 19	*17.9*	*13.7*	*11.2*	*6.0*	*5.5*	*2.7*
Marital status						
Never married	8.6	5.9	5.6	3.8	3.2	1.6
Married/ living together	72.0	58.5	44.6	75.0	75.0	35.0
Widowed/ divorced/ separated	52.2	43.5	26.1	100.0	100.0	50.0
Missing	5.3	5.3	5.3	0.0	0.0	0.0
Total	*17.9*	*13.7*	*11.2*	*6.0*	*5.5*	*2.7*
Recently sexually active but unmarried	54.7	44.2	32.6	56.5	52.2	26.1

Table 8: Current, past and future use of used family planning by age, marital status and unmarried but recently sexually active

	Female % Currently using a method N= 129	Used a method at last sex N= 154	Intention to use in the future N= 758	**Male %** Knows where to get condoms N= 378	Used a method at last sex N= 35
Age range					
10 -14	0.0	0.2	38.3	40.8	0.2
15 – 19	12.9	15.3	59.9	71.5	12.0
10 – 19	*9.1*	*10.9*	*53.6*	*53.0*	*4.9*
Marital status					
Never married	4.2	5.5	50.8	52.1	3.3
Married/ living together	38.3	42.5	71.5	85.0	50.0
Widowed/ divorced/ separated	21.7	26.1	87.0	100.0	100.0
Missing	5.3	5.3	5.3	0.0	0.0
Total	*9.1*	*10.9*	*53.6*	*53.0*	*4.9*
Recently sexually active but unmarried	31.4	39.5	75.6	100.0	60.9

Table 9: Distribution of family planning method used at last sex and future intentions of use

	Female %			**Male %**		
	10 – 14 N= 4	15 – 19 N= 249	10 – 19 N= 253	10 – 14 N= 3	15 – 19 N= 40	10 – 19 N= 43
Family planning method used at last sex						
Male sterilization	0.0	0.4	0.4	0.0	2.5	2.3
Pill	0.0	14.1	13.8	0.0	2.5	2.3
Injectables	0.0	3.6	3.6	N/A	N/A	N/A
Male condom	25.0	20.9	20.9	33.3	67.5	65.1
Female condom	0.0	0.4	0.4	0.0	2.5	2.3
Rhythm method	0.0	16.9	16.6	0.0	2.5	2.3
Withdrawal	0.0	2.4	2.4	0.0	0.0	0.0
Other	0.0	0.8	0.8	0.0	0.0	0.0
Used no method	75.0	40.6	41.1	66.7	22.5	25.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Preferred future family planning method						
Male sterilization	0.0	10.0	9.9	**N/A	N/A	N/A
Pill	50.0	20.1	20.6	N/A	N/A	N/A
IUD	0.0	2.0	2.0	N/A	N/A	N/A
Injectables	0.0	35.7	35.2	N/A	N/A	N/A
Male condom	0.0	6.0	5.9	N/A	N/A	N/A
Female condom	0.0	0.8	0.8	N/A	N/A	N/A
Diaphragm	25.0	0.4	0.8	N/A	N/A	N/A
Foam/ Jelly	0.0	0.4	0.4	N/A	N/A	N/A
*NK	0.0	2.4	2.4	N/A	N/A	N/A
Use no method	25.0	19.3	19.4	N/A	N/A	N/A
Total	100.0	100.00	100.0	N/A	N/A	N/A

*NK-

**N/A-

Table 10: Source of family planning information over the last few months by age and gender

	Source of family planning information %					
	Radio	**Television**	**Magazine**	**Poster**	**Shop**	**Socializing**
Female N/ %	**412**	**282**	**54**	**144**	**101**	**270**
10 – 14	19.1	10.9	0.2	6.1	3.1	10.2
15 – 19	33.2	23.7	5.3	11.9	8.8	22.8
10 – 19	*29.1*	*19.9*	*3.8*	*10.2*	*7.1*	*19.1*
Male N / %	**211**	**110**	**30**	**75**	**28**	**76**
10 – 14	24.5	11.0	1.9	6.3	1.9	7.9
15 – 19	37.3	22.2	7.7	16.9	7.0	14.8
10 – 19	*29.6*	*15.4*	*4.2*	*10.5*	*3.9*	*10.7*

Table 11: Importance of family planning to adolescents by gender, age, marital status and not married but sexually active

	Importance of family planning to adolescents N (%)				
	Reduce unwanted pregnancies	**Reduce STI risk**	**Improve MCH**	**Reduce maternal deaths**	**Improve health and well-being**
Female n/ %	**905**	**602**	**829**	**737**	**843**
Age range					
10 – 14	39.2	27.1	40.4	33.7	41.9
15 – 19	74.2	48.9	66.1	59.7	66.9
10 – 19	64.0	42.5	58.6	52.1	59.6
Marital status					
Never married	60.9	41.0	56.8	49.7	57.1
Married/ living together	84.5	52.8	71.5	68.9	76.2
Widowed/ separated/ divorced	87.0	60.9	82.6	69.6	87.0
Missing	15.8	10.5	10.5	10.5	10.5
Total	*64.0*	*42.5*	*58.6*	*52.1*	*59.6*
Recently sexually active but unmarried	89.5	65.1	83.7	75.6	82.6
Male n/ %	**414**	**293**	**405**	**371**	**418**
Age range					
10 – 14	47.1	35.0	46.9	42.2	48.8
15 – 19	74.6	50.4	71.8	66.9	74.3
10 – 19	*58.1*	*41.1*	*56.8*	*52.0*	*58.6*
Marital status					
Never married	57.6	41.1	56.0	51.5	57.9
Married/ living together	75.0	50.0	85.0	75.0	85.0
Widowed/ separated/ divorced	100.0	0.0	100.0	50.0	100.0
Missing	0.0	0.0	0.0	0.0	0.0
Total	*58.1*	*41.1*	*56.8*	*52.0*	*58.6*
Recently sexually active but unmarried	5.7	60.9	87.0	87.0	95.7

Table 12: Adolescents perception of family planning by gender, age, marital status and not married but sexual active

	Adolescent perceptions of family planning %				
	Women's responsibility	**Makes women promiscuous**	**Many children dangerous**	**Better not to have more children**	**Smaller families succeed**
Female n/ %	582	620	1008	1183	1079
Age range					
10 – 14	30.8	28.8	59.6	69.2	62.2
15 – 19	45.4	50.0	77.1	89.5	82.0
10 – 19	41.1	43.8	71.2	83.6	76.3
Marital status					
Never married	38.8	42.5	70.3	82.5	75.0
Married/ living together	57.5	53.4	81.3	95.3	88.6
Widowed/ separated/ divorced	43.5	65.2	82.6	95.7	87.0
Missing	15.8	5.3	15.8	15.8	15.8
Total	*41.1*	*43.8*	*71.2*	*83.6*	*76.3*
Recently sexually active but unmarried	44.2	55.8	87.2	97.7	88.4
Male n/ %	231	303	455	549	509
Age range					
10 – 14	30.3	36.1	57.6	70.6	64.8
15 – 19	35.6	52.1	73.2	86.6	81.3
10 – 19	*32.4*	*42.5*	*63.8*	*77.0*	*71.4*
Marital status					
Never married	32.5	43.0	63.3	76.6	71.6
Married/ living together	35.0	30.0	85.0	95.0	70.0
Widowed/ separated/ divorced	0.0	50.0	100.0	100.0	100.0
Missing	0.0	0.0	0.0	0.0	0.0
Total	*32.4*	*42.5*	*63.8*	*77.0*	*71.4*
Recently sexually active but unmarried	39.1	78.3	78.3	91.3	95.7

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