

SEXUAL BEHAVIOUR AND CONTRACEPTION AMONG UNMARRIED ADOLESCENTS AND YOUNG ADULTS IN GREATER ACCRA AND EASTERN REGIONS OF GHANA

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Summary. A fertility survey of unmarried adolescents and young adults (953 males and 829 females) in Greater Accra and Eastern regions of Ghana revealed that a substantial proportion of the respondents were sexually experienced. Overall, 66.8% of the males and 78.4% of the females were sexually experienced. The mean ages (\pm SD) of the males and females were 15.5 ± 2.5 and 16.2 ± 2.0 years, respectively. Most respondents claimed to have received adequate information on reproductive health and sexually transmitted diseases (STDs), including AIDS. However, 20% and 30% of the respondents in peri-urban and rural areas, respectively, did not know that a girl could get pregnant the first time she has sexual intercourse. The incidence of pregnancy among the unmarried female respondents was relatively high (37%), and was higher in urban than in rural areas. Approximately 47% of those who had ever been pregnant reported that they had had an abortion. Levels of contraceptive awareness were high (98.2% among males and 95.5% among females) but many still engaged in unprotected sexual relations. The most commonly used methods were the condom and the pill. The main reasons given for non-use were that they did not think about contraception, were concerned about the safety of contraceptives, and partner objection. These findings point to the need for targeting of unmarried adolescents and young adults with information on reproductive health and family planning to increase their awareness of the risks of pregnancy, STDs and HIV infection.

Introduction

The increasing trend of out-of-wedlock pregnancy among adolescents and young adults in Africa is a major social concern (Agyei & Epema, 1990, 1992; Agyei,

Mukiza-Gapere & Epema, 1994; Ajayi *et al.*, 1991; Letamo, 1993; Gage & Meekers, 1993; Buga *et al.*, 1996; Mbizvo *et al.*, 1995). There is a consensus that this is a phenomenon with detrimental effects for African society. The social, economic and health problems associated with early and unintended pregnancies have been documented in studies around the world. Premarital and unintended adolescent and young adult pregnancies may lead to school dropouts, limited career opportunities or increased health risk from pregnancy complications and abortions (Kane *et al.*, 1993). In addition, early sexual activity may also lead to exposure to sexually transmitted diseases (STDs), including HIV infections (Buga *et al.*, 1996; Agyei, Epema & Lubega, 1992; Mbizvo *et al.*, 1995). The recent literature also reveals some insight into the causes of premarital pregnancy among adolescents and young adults in Africa. It is attributed largely to a general decline in traditional norms that prevented premarital pregnancy, and in part to development and westernization (Gage & Meekers, 1993). Other reasons include earlier physical maturity and lack of social alternatives for family guidance in modern African society (Mbizvo *et al.*, 1995; Makiwane, 1998).

While substantial literature exists describing the sexual behaviours of adolescents and young adults in many parts of Africa (Agyei & Epema, 1992; Ajayi *et al.*, 1991; Bledsoe & Cohen, 1993; Kane *et al.*, 1993; Gyepi-Garbrah, 1985; Barker & Rich, 1992; Nicols *et al.*, 1986, 1987), only a few studies have focused explicitly on the sexual behaviour of the unmarried (Lapido *et al.*, 1983; Gage & Meekers, 1993; Makiwane, 1998). Sexual activity among unmarried adolescents and young adults in Ghana is high and widespread, resulting in unintended pregnancies and illegal abortions. Data from Korle Bu Teaching Hospital, Accra, other selected government hospitals and maternal and child health (MCH) clinics in Ghana reveal that the pregnancy rate of adolescents and young adults is very high (Ampofo, 1989; Gyepi-Garbrah, 1987; Asare-Bediako, 1989; Ghana Statistical Service, 1989, 1994). A recent situational analysis of adolescent reproductive health needs reported that adolescent sexual activity and the upsurge of adolescent pregnancies are becoming real problems in Ghana (Nabila, Fayorsey & Pappoe, 1996). One of the major reasons why adolescent girls drop out of school is pregnancy (Akuffo, 1987; Oppong & Abu, 1987). Pregnancy-related dropouts are widespread, even at advanced levels (Ferguson, Gitaonga & Kabira, 1988). Consequently, many adolescent and young adult women resort to unsafe and illegal abortion rather than face the serious social and personal repercussions of pregnancy (Bledsoe & Cohen, 1993).

Accordingly, this study was undertaken to investigate the patterns of sexual maturation, sexual behaviour, contraceptive practices and reproductive health issues among unmarried adolescents and young adults in Greater Accra and Eastern regions of Ghana. The information obtained will be important for planning intervention measures for improvement of reproductive health among the youth.

Study design and methods

The study population consisted of unmarried adolescent and young adult males and females in the 15–24 year age group in the Greater Accra region, as well as in two

districts in the Eastern region of Ghana. In Ghana, various types of marriage exist, ranging from customary, civil and religious, to a variety of informal unions. Throughout this paper, the term 'unmarried' refers to respondents who have not been involved in either formal or informal unions. Although the emphasis is on late adolescents (15–19 years old), the research extended beyond adolescence to cover the population between ages 15 and 24 years, to allow comparison of the sexual behaviour and contraceptive use of late adolescents with the nearest adult age group (20–24).

The design of the survey used the updated sampling frame developed by the Ghana Central Statistical Bureau in 1988. A multi-stage random sampling technique was adopted in selecting households for the survey in both urban and rural areas. In the Greater Accra region, three sub-districts were randomly selected (Ablekuma, Ayawaso and Ashiedu Keteke) out of a total of eight. Within each selected sub-district, five city wards were randomly selected (a total of fifteen city wards). Ninety households were then selected at random in each city ward (1350 households). Five villages in the Amasaman local council area (Ardeman, Dome, Kwashie Kumaman, Manhia and Afuaman) were also randomly selected to represent Accra rural (200 households). In the Eastern region, the primary sampling units were local councils. Begoro local council and Koforidua municipal council areas were selected at the first stage. Two villages were selected in the Begoro local council area (Nsutam and Akyem Heman) and four villages in the Koforidua municipal area (Akwadum, Suhyen, Asikasu No. 1 and Asikasu No. 2) through a simple random technique based on population. Four hundred and fifty households were randomly selected from Begoro local council area and 550 households were also randomly selected from the Koforidua municipal area. The rural samples are proportional to population size.

The proportions of male and female respondents were estimated to be approximately equal (50% male and 50% female). Two measures were adapted at the time of interview in order to balance the sex composition of the respondents:

- i. An equal number of male and female interviewers were hired and trained for the data collection process. Male interviewers interviewed male respondents and female interviewers interviewed female respondents.
- ii. A maximum of two respondents were interviewed in each household.

It was anticipated that each household would have an eligible adolescent (15–19 years old) or a young adult (20–24 years old). The sample from Accra metropolitan area (1350 households) and those from rural areas (1200 households) were estimated to yield 2550 respondents. The Accra metropolitan area was over-sampled because the data for the three sub-districts were to be analysed separately.

A research instrument (questionnaire) was developed in September 1995 and administered to obtain the following information: sociodemographic characteristics, sexual behaviour, reproductive health education, pregnancy, abortion, sexually transmitted diseases including AIDS and knowledge and use of contraception. The questionnaire was pre-tested in March 1996.

The survey was conducted in July 1996 in both Greater Accra and Eastern regions. A total of 2012 (78.9%) young men and women were interviewed out of the initial sample of 2550; however, some respondents were ineligible because they were younger

than 15 or older than 24, and some questionnaires had not been filled in properly by the interviewers, reducing the sample for analysis to 1782 (70.0%). The total number of respondents included in the analysis for this report was 1782 (953 males and 829 females). For the purposes of this analysis, the unmarried respondent sample was classified into three residential areas: 564 young men and 509 young women from Accra, a major metropolitan area; 228 young men and 205 young women from peri-urban areas (made up of four towns in the Eastern region: Nsutam, Akyem Hemang, Akwadum and Suhyen); and 161 young men and 115 young women from rural areas.

Results

The distribution of selected social and demographic characteristics of the respondents is shown in Table 1. While only a small proportion of male and female respondents had no formal education, levels of educational attainment in males tended to be higher at the senior secondary school (SSS) and post-secondary levels. About 27% of the males and 12% of the females had attained senior secondary and post-secondary levels. Forty per cent of all the respondents were attending school at the time of the survey (44.5% of the males and 36.1% of the females), and approximately 32% were working. However, similar proportions of males and females were neither in school nor working. Approximately 80% of the male and 85% of the female respondents in all three residential areas were Christians (Protestants and Catholics), while approximately 12% were Muslims. The age distribution reveals that 61% of the respondents were adolescents (15–19 years old) and 39% were young adults (20–24 years old). A close examination of the female age distribution shows that the proportion of adolescent female respondents to young adult female respondents is 2 to 1, indicating that a higher proportion of the 20–24-year-olds were married. This is consistent with the findings in the 1993 GDHS. The data on marital status show that 77.6% and 24.7% of the 15–19- and 20–24-year-olds, respectively, had never been married. The median age at first marriage according to the 1993 GDHS increased from 18.3 years in 1988 to 18.9 years in 1993. This shift represents a general tendency towards delaying marriage.

Sexual maturation and sexual behaviour

Table 2 shows the sexual behavioural characteristics and sexual maturation developments of the unmarried male and female respondents. The reported mean age at which menarche took place was 13.8 ± 1.4 years. Females reported higher levels of sexual activity than males. In the entire sample, 66.8% of the males and 78.4% of the females were already sexually experienced (sexual experience was defined here as having had sexual intercourse at least once). Although the male respondents initiated sexual activity at an earlier age (15.3 vs 16.2 years; $p=0.0018$), the female respondents had sexual intercourse more regularly.

Table 2 also reveals 'by gender' the number of different sexual partners the sexually active respondents had during the 12 months preceding the survey. Approximately

44% of the males and 75% of the females had only one sexual partner in the 12 months preceding the survey ($p < 0.001$), while 36.6% of the males and 22.8% of the females reported having had two to three partners. Furthermore, 19% of the male respondents contrasted with only 2% of the female respondents reported having four or more partners during the period.

The data presented in Table 3 provide evidence that area of residence and education have some influence on age at first sexual experience. For example, among the male respondents 15–19-year-olds who lived in the more affluent areas of North Ridge and Airport Residential in Accra had a mean age at first sexual intercourse of 13.3 ± 2.4 years compared with 15.5 ± 2.1 years ($p < 0.05$) for their counterparts in rural areas. Interestingly enough, the variation among the female respondents in the same age group was not significant. As regards education, it is evident in Table 3 that both male and female respondents who had no formal education started sexual activity much earlier than those who attended school up to senior secondary school level (13.9 ± 2.6 years vs 15.7 ± 2.0 years, i.e. mean \pm SD). Although Table 3 reveals that the 1996 cohort of 15–19-year-olds started their sexual activity approximately 2 years earlier than the 20–24-year-olds, this difference could be accounted for by the smaller sample size. Data from the 1993 GDHS show that the proportion of women having intercourse before age 20 has not changed significantly. For example, among married women in the 20–29, 30–39 and 40–49 year age groups, 88.0%, 87.5% and 88.5% respectively had first intercourse before age 20.

Reproductive health information

The unmarried male and female respondents were questioned regarding their knowledge of reproduction, contraception, sexually transmitted diseases and protective methods to avoid HIV infection. Overall 83.6% of the respondents claimed to have received information on reproductive health (see Table 4). It was also found that the respondents were very knowledgeable about STDs. The questionnaire listed STDs, and respondents were asked to mention STDs by name. Almost all respondents had heard of at least one STD including AIDS. In terms of STD/AIDS prevention, about 85% of the respondents knew that condom use prevents STD/AIDS. This may be due to the government (National AIDS/STD Control Programme) and non-governmental organization (NGO) AIDS awareness campaigns.

A subsequent question, designed to measure the quality of reproductive knowledge, asked the respondents if a girl can get pregnant the first time she has sexual intercourse. Table 4 reveals that eight out of ten respondents in Accra and peri-urban areas and seven out of ten in rural areas knew that pregnancy could occur at the first sexual experience. This knowledge was higher in females and increased with age. However, 20% of the respondents did not know that a girl could become pregnant on her first sexual encounter.

The main sources of information about reproductive health for both sexes in all three residential areas were friends, school and movies/videos. These three sources account for more than 75% of the information acquired by the respondents. Parents and siblings also provide substantial information, especially to the female

Table 1. Percentage distribution of selected sociodemographic characteristics of unmarried adolescents and young adults according to residence, Adolescent Fertility Survey, Ghana 1996

Characteristic	All		Accra		Peri-urban		Rural	
	Males	Females	Males	Females	Males	Females	Males	Females
Number	953	829	564	509	228	205	161	115
Education*								
None	3.6	7.9	2.5	6.3	3.8	3.6	7.3	19.4
Primary	12.2	20.0	10.5	17.8	7.5	18.1	24.3	30.6
JSS	55.4	58.3	52.5	56.7	58.8	68.1	61.0	49.4
SSS	23.0	9.9	26.7	13.3	27.5	8.9	4.5	0.0
Post-secondary	3.9	2.0	5.7	3.1	1.3	0.8	1.7	0.0
Other	1.8	1.8	2.1	2.8	1.1	0.5	1.2	0.6
Total	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Current activity								
In school	44.5	36.1	46.8	39.1	42.5	29.4	39.5	35.9
Working	30.9	32.9	30.7	33.5	27.5	27.0	36.2	39.4
Neither	19.6	20.7	19.5	16.1	20.4	31.0	18.6	21.2
Other	5.0	10.3	3.0	11.3	9.6	12.6	5.7	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Religion								
None	5.5	4.1	5.7	5.2	3.8	1.6	7.3	4.1
Protestant	67.2	77.0	60.5	70.9	75.0	84.7	79.1	86.5
Roman Catholic	11.1	7.5	14.0	8.7	7.5	4.4	7.3	7.6
Muslim	13.6	10.1	16.7	13.4	11.7	8.5	5.6	1.2
Traditional	0.7	0.6	0.8	0.9	0.4	0.4	0.7	0.0
Other	1.8	0.7	2.3	0.9	1.6	0.4	0.0	0.6
Total	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Level attained. Note: columns may not add up to 100% because of rounding.

Table 1. Continued

Characteristic	All		Accra		Peri-urban		Rural	
	Males	Females	Males	Females	Males	Females	Males	Females
	Age (years)							
15-19	543	547	315	345	137	131	96	71
15	133	137	75	85	33	32	25	20
16	113	119	66	74	26	27	21	18
17	121	106	68	69	30	24	23	13
18	92	94	55	57	24	27	13	10
19	89	91	51	60	24	21	14	10
20-24	405	282	249	164	91	74	65	44
20	102	71	58	42	26	18	18	11
21	92	63	55	37	21	16	16	10
22	79	53	51	32	14	12	14	9
23	71	49	46	28	17	15	8	6
24	61	46	39	25	13	13	9	8

*Level attained. Note: columns may not add up to 100% because of rounding.

Table 2. Sexual maturation and behaviour of unmarried respondents, Adolescent Fertility Survey, Ghana 1996

Behaviour	Males	Females	<i>p</i> value	Significance
Sexual maturation	(<i>n</i> =953)	(<i>n</i> =829)		
Menarche		83.9%		
Mean age ± SD	15.5 ± 1.8	13.8 ± 1.4	0.0000	S
Sexual experience	(<i>n</i> =953)	(<i>n</i> =829)		
Experienced	66.8%	78.4%	0.0129	S
Not experienced	33.2%	21.6%		
Sexual activity	(<i>n</i> =637)	(<i>n</i> =650)		
Regular activity	61.5%	74.3%	0.0044	S
Irregular activity	38.5%	25.7%		
Frequency of sexual activity	(<i>n</i> =392)	(<i>n</i> =483)		
1–3 times/month	68.7%	84.7%	0.0000	S
4 or more times/month	31.3%	15.3%		
Number of sexual partners in the past 12 months	(<i>n</i> =417)	(<i>n</i> =512)		
1	43.9%	74.6%	0.0000	S
2–3	36.6%	22.8%	0.0027	S
4 or more	19.4%	2.4%	0.0000	S
Age at first coitus	(<i>n</i> =637)	(<i>n</i> =650)		
Mean age ± SD	15.5 ± 2.5	16.2 ± 2.0	0.0000	S

n=total number of respondents in each category from which the percentages are derived.

S=significant at 5% level.

SD=standard deviation.

respondents, mothers and sisters more frequently being sources for females (13.3%) than fathers and brothers are for males (4.7%).

Attitudes towards sexual behaviour

One of the main objectives of the Adolescent Fertility Survey in Ghana was to ascertain the attitudes of unmarried adolescents and young adults towards sexual activity, contraception, reproductive health and adolescent pregnancy in an effort to provide some quantitative data on which future programmes could be developed. Table 5 provides information on the percentages of respondents who approved of premarital sexual relations and use of contraception among sexually active unmarried adolescents and young adults.

Approval of premarital sex under any condition was given by 25% of the male and 16% of the female respondents. The data reveal that male respondents have a significantly higher approval rate than their female counterparts ($p < 0.05$). However, as regards premarital sex among those who plan to be married, approval level was significantly higher for the female respondents than their male counterparts (see Table 5). It is clearly evident in Table 5 that the majority of the male and female

Table 3. Mean age at first sexual intercourse by residence and education, Adolescent Fertility Survey, Ghana 1996

	Age group	Mean	SD	Cases	
Residence					
Accra*	15-19				
	Males	14.5	2.3	105	
	Females	15.0	2.2	153	
	20-24				
	Males	16.5	2.7	201	
	Females	17.4	2.0	131	
	North Ridge and Airport Residential	15-19			
		Males	13.3	2.4	36
Females		15.1	2.5	18	
20-24					
Males		17.0	2.8	25	
Females		17.6	1.4	32	
Peri-urban		15-19			
		Males	14.9	2.2	66
	Females	15.6	1.5	105	
	20-24				
	Males	17.1	2.9	85	
	Females	17.4	1.7	85	
	Rural	15-19			
		Males	15.5	2.1	52
Females		15.2	1.7	57	
20-24					
Males		17.1	2.6	67	
Females		16.0	2.7	69	
Education					
None		Both sexes 15-19	13.9	2.6	43
	Both sexes 20-24	15.8	3.0	52	
Primary	Both sexes 15-19	14.6	2.0	93	
	Both sexes 20-24	16.7	2.3	134	
JSS	Both sexes 15-19	15.0	2.1	366	
	Both sexes 20-24	17.2	2.3	280	
SSS	Both sexes 15-19	15.7	2.0	90	
	Both sexes 20-24	17.0	2.5	229	

*Excluding North Ridge and Airport Residential area.

respondents disapproved of premarital sexual activity. These findings are similar to those in Kenya, The Gambia and Uganda, but contrast with findings in Liberia and Nigeria where the majority of adolescents and young adults approved of premarital sexual relations (Agyei & Epema, 1992; Ajayi *et al.*, 1991; Kane *et al.*, 1988; Nichols *et al.*, 1986; Woods *et al.*, 1985). Table 5 also reveals that the majority of the surveyed population favoured the use of contraception by unmarried adolescent and young adults if they are sexually active.

Table 4. Percentage distribution of unmarried respondents by statements of reproductive health by area of residence, Adolescent Fertility Survey, Ghana 1996

	Accra		Peri-urban		Rural	
	Males (n=564)	Females (n=509)	Males (n=228)	Females (n=205)	Males (n=161)	Females (n=115)
Had reproductive health information	89.9	86.0	79.6	81.9	74.0	65.9
Pregnancy can occur the first time a girl indulges in sexual intercourse	83.3	82.0	77.9	80.2	70.1	72.9
Knowledge of sexually transmitted diseases (STDs)	89.2	83.4	80.4	79.8	75.7	61.8
Condom use prevents STDs	86.5	89.2	90.4	90.3	91.0	85.3
Contraceptive knowledge	98.2	95.5	96.3	97.2	94.9	91.8

Pregnancy, abortions and childbearing

Adolescent pregnancy, abortions and childbearing have become issues of broad public concern. According to Nabila and his associates, adolescent sexual activity and the upsurge of adolescent pregnancies and illegal abortions are becoming a real problem in Ghana (Nabila *et al.*, 1996). These data show that pregnancy among unmarried adolescents and young adult respondents is not uncommon in all three residential areas. Table 6 reveals that the level of adolescent pregnancy is higher in urban than in peri-urban and rural areas. This finding is similar to that of the 1993 GDHS, as well as findings in Nigeria, Kenya and Tanzania (Orubuloye, Caldwell & Caldwell, 1991; Muraya, 1985; Kamuzora, 1987). In general, these findings support the argument that the traditional social restraints to early sexual activity are being loosened by urbanization. Consequently, adolescents who live in urban areas tend to have less parental control, less parental support and less parental disapproval of problem behaviours, and are more likely to initiate sexual activity than those whose parents provide constant guidance.

The data show that one out of five sexually active adolescents had been pregnant at least once. The proportion of sexually active young adults who had been pregnant was seven out of ten. Among the 15–19-year-old respondents, 14.1% of those in rural areas reported having been pregnant, while among their counterparts in the peri-urban and Accra areas that proportion was 16.8% and 22.9%, respectively. Among the 20–24-year-olds, the proportions of those who had ever been pregnant ranged from 54.5% for rural to 62.2% and 76.8% for peri-urban and Accra areas, respectively. Pregnancy increases with age: for example, among the 15-year-olds only about 6% reported ever having been pregnant, whereas at age 19 this figure was 37%.

Table 6 also provides some information on the level of induced abortion in the areas surveyed. Although most of the interviewers were nurses and paramedical workers, the difference between induced and spontaneous abortion was emphasized during the training of the interviewers. Accordingly, it was not difficult for the

Table 5. Attitudes towards sex, pregnancy and contraception among unmarried adolescents and young adult respondents, Adolescent Fertility Survey, Ghana 1996

Statement	Males	Females	<i>p</i> value	Significance
Approve of premarital sex	(<i>n</i> =953)	(<i>n</i> =829)		
Never	61.5%	63.3%	0.8362	NS
Anytime	24.8%	15.9%	0.0018	S
If engaged	13.7%	20.8%	0.0025	S
Favour contraceptive use	(<i>n</i> =953)	(<i>n</i> =829)		
Yes	91.4%	89.6%	0.8910	NS
No	8.5%	8.8%		
Don't know	0.1%	1.6%		
Contraceptive use	(<i>n</i> =637)	(<i>n</i> =650)		
Never used	46.3%	62.4%		
Ever used	53.7%	37.6%	0.0000	S
Currently using	40.2%	25.9%	0.0027	S
Type of contraceptive	(<i>n</i> =342)	(<i>n</i> =244)		
Pills	13.6%*	24.8%		
Injectable Progestins	4.5%*	21.6%		
Condoms	79.8%	45.2%	0.0000	S
Others**	2.1%*	8.4%		
Pregnancy	(<i>n</i> =637)	(<i>n</i> =650)		
Never pregnant/father	93.4%	63.0%		
Ever pregnant/father	6.6%	37.0%	0.0000	S
Currently pregnant	—	11.8%		

n=total number of respondents in each category from which the percentages are derived.

S=significant at the 5% level.

NS=not significant at the 5% level.

*Male respondents reported that their partners used these methods.

**Rhythm method, foam tablets and traditional methods.

interviewers to make sure that respondents understood the meaning of abortion and its difference from miscarriage. The data show that the incidence of induced abortion is extremely high. Almost half (46.5%) of the young women who had ever been pregnant had terminated a pregnancy; this proportion ranged from 23.5% in rural areas to 52.7% in Accra, probably reflecting the greater availability of health services in the capital city. Among the 15–19-year-olds who reported ever having been pregnant, four out of ten had had an abortion, while among the 20–24-year-olds, one out of two pregnancies ended in abortion.

A closer examination of pregnancy and abortion data in Table 7 reveals that in the more affluent areas of North Ridge and Airport Residential in Accra, the pregnancy level is relatively low but the incidence of abortion is extremely high – 90%. The sexually active male respondents were asked if they had ever made someone pregnant. A follow-up question then asked, how did the pregnancy end? The answers to these questions are also presented in Table 7. A striking feature of this table is that

Table 6. Percentage of sexually experienced unmarried female respondents who had ever been pregnant and who were pregnant at the time of the survey, by current age and residence, Adolescent Fertility Survey, Ghana 1996

	All			Accra			Peri-urban			Rural		
	Ever pregnant	Currently pregnant	Ever pregnant	Currently pregnant	Ever pregnant	Currently pregnant	Ever pregnant	Currently pregnant	Ever pregnant	Currently pregnant	Ever pregnant	Currently pregnant
Total	37.0	11.8	59.4	12.8	33.2	11.2	29.6	8.7	37.0	11.8	59.4	12.8
15-19	20.3	8.8	22.9	9.6	16.8	8.4	14.1	5.6	20.3	8.8	22.9	9.6
15	5.8	4.4	7.1	5.8	3.1	3.1	5.0	0.0	5.8	4.4	7.1	5.8
16	12.6	6.7	16.2	6.8	7.4	7.4	5.6	5.6	12.6	6.7	16.2	6.8
17	19.8	8.5	21.7	8.7	16.7	8.3	15.4	7.7	19.8	8.5	21.7	8.7
18	35.1	12.5	38.6	14.0	29.6	11.1	30.0	10.0	35.1	12.5	38.6	14.0
19	37.4	14.3	40.0	15.0	33.3	14.3	30.0	10.0	37.4	14.3	40.0	15.0
Ever had an abortion*	40.5		43.0		40.9		20.0		40.5		43.0	
20-24	69.5	17.7	76.8	19.5	62.2	16.2	54.5	13.6	69.5	17.7	76.8	19.5
20	53.5	16.9	57.1	19.0	50.0	16.7	45.5	9.1	53.5	16.9	57.1	19.0
21	68.3	15.9	75.7	18.9	56.3	12.5	60.0	10.0	68.3	15.9	75.7	18.9
22	71.7	17.0	78.1	18.8	66.7	16.7	55.6	11.1	71.7	17.0	78.1	18.8
23	79.6	20.4	89.3	21.4	66.7	20.0	66.7	16.7	79.6	20.4	89.3	21.4
24	82.6	19.6	96.0	20.0	76.9	15.4	50.0	25.0	82.6	19.6	96.0	20.0
Ever had an abortion*	50.0		58.7		39.1		25.0		50.0		58.7	
15-24	46.5		52.7		39.7		23.5		46.5		52.7	

*Percentage of respondents who had ever been pregnant.

Table 7. The number of pregnancies and number reporting abortions by residence, Adolescent Fertility Survey, Ghana 1996

Residence	Female respondents			Male respondents*		
	Number of pregnancies	Abortions	Percentage aborted	Number of pregnancies	Abortions	Percentage aborted
Accra**	186	91	48.9	85	49	57.6
North Ridge/ Airport Residential	19	17	89.5	10	9	90.0
All Accra†	205	108	52.7	95	58	61.1
Peri-urban	68	27	39.7	29	12	41.4
Rural	34	8	23.5	23	5	21.7
Total	307	143	46.5	147	75	51.0

*Unmarried male respondents who ever made their partners pregnant.

**Excluding North Ridge and Airport Residential area.

†Including North Ridge and Airport Residential area.

although the respondents admitted being responsible for only ten pregnancies in North Ridge and Airport Residential areas, nine of the ten pregnancies ended in abortions yielding an abortion rate exactly the same as that of the female respondents. Emphasis was put on North Ridge and Airport Residential areas because it is generally assumed that out-of-wedlock pregnancy and induced abortion occur mainly among the poor and illiterate families.

Overall, 76.6% of the reported abortions had been performed in health institutions (hospitals and health clinics), and 18% at home. According to the respondents, approximately 76% of the abortions were performed by doctors, 4% by nurses and the remaining 20% by others. Abortion in Ghana is illegal, except under conditions of rape, incest or when the mother's health is at risk. It must be emphasized that the number of abortions is likely to be under-reported because of the respondent's reluctance to report an illegal abortion.

Contraception among sexually active respondents

The respondents were asked if they were familiar with methods that a couple could use to prevent unintended pregnancy. Those who said they were familiar with such methods were then asked to name the methods they had heard about. As Table 4 shows, the level of awareness was high among the respondents (97.3% among males and 95.3% among females) and was only slightly higher for total male than female respondents.

To assess attitudes towards the use of contraception, the question was asked whether sexually active unmarried adolescents and young adults should use contraception (see Table 5). Approximately 91.4% and 89.6% of the total male and female respondents, respectively, were in favour of the use of contraception before marriage.

In spite of the fact that contraceptive use approval was very high, the level of contraceptive use was relatively low. The data reveal that 40.2% and 25.9% of the total male and female respondents, respectively, who were sexually active at the time of the survey were using contraception.

As regards contraceptive methods used by the respondents who reported use, the data reveal that approximately 80% of the males and 45% of the females used condoms. Almost a quarter of the female users (24.8%) used the pill and 13.6% of the males reported that their partners used the pill. Another 21.6% of the female users used injectables and the rest indicated that they used the rhythm method, foam tablets, etc. These are used mainly in peri-urban and rural areas suggesting that ineffective contraceptive methods are used outside the Accra metropolitan area.

It is evident that there is a gap between attitudes and practice. However, a number of male and female respondents were not at risk of unwanted children because some of them wanted children, others were not currently sexually active, and some females were pregnant at the time of the interview. Nevertheless, the fact that more than two-thirds of those at risk of pregnancy were not using contraception raises the question of how to encourage them to do so.

The respondents who were at risk (i.e. male and female respondents who were sexually active, did not want to have children and did not use contraceptives) of unwanted children were asked to indicate why they were not using contraceptives. The responses given by the non-users (136 males and 222 females) were as follows: overall, about one-third of the sexually active male non-users and slightly over a quarter (26.1%) of their female counterparts said they did not think about contraception. Fears about safety of contraceptives were cited by almost equal proportions of male and female non-users (22.8% males vs 21.6% females). Safety concern was given as a reason more frequently in the peri-urban and rural areas than in Accra by the female respondents. Another substantial group of male and female respondents indicated that their partners objected to the use of contraception (19.9% males vs 21.6% females).

Further, another group of male and female respondents gave other reasons as the answer to non-use of contraception. Respondents in this category (12.5% males and 20.7% females) may include those who lack adequate knowledge of contraceptives. Moreover, some adolescent and young adult females do not believe that they can become pregnant if sexual activity is infrequent. Such female respondents are also likely to be included in the 'other reasons' category. It may be pointed out that a relatively large proportion of female non-users in Accra are found in this category compared with their counterparts in peri-urban and rural areas.

Discussion and conclusion

This paper has examined unmarried adolescents' and young adults' premarital sexual behaviour and experience, knowledge of reproductive health, contraceptive knowledge and attitudes as well as their knowledge of STDs including AIDS in Greater Accra and Eastern regions of Ghana. The analysis reveals that the majority of the sample of unmarried adolescents and young adults were sexually active and the level of sexual activity was high. This high level of sexual activity is by no means restricted to

Ghana. Similar reports have emerged from other parts of sub-Saharan Africa (Richter *et al.*, 1997; Buga *et al.*, 1996; Makiwane, 1998; Mbizvo *et al.*, 1995; Gage & Meekers, 1993; Agyei & Epema, 1990, 1992; Agyei *et al.*, 1994; Campbell & Mbizvo, 1994; Agyei *et al.*, 1992). Overall, the mean age at first coitus is 15.5 years for males and 16.2 years for females. It is important to note that sexual activity starts at a very young age.

Contrary to the view that education is one of the main factors causing a decline in the mean age at first sexual intercourse, the data show that higher levels of education are associated with a later mean age at first sexual intercourse. It is argued that the mean age at first coitus is declining as a consequence of increasing education (Gyepi-Garbrah, 1985; Buga *et al.*, 1996; Makiwane, 1998; Grace & Strasbuger, 1992). Since formal education exposes adolescents to Western values, better-educated youths are more likely to adopt the ideals of romantic love and intimacy. Education may also contribute to the decline in traditional restraints to early sexual activity.

The incidence of pregnancy is fairly high, and is higher in urban and peri-urban areas than in rural areas. Abortions among the respondents were common. The current school (primary and secondary) policy is such that an adolescent or young adult female who becomes pregnant is expelled from school. While the possibility of attending another school may exist, the weakening role of the extended family in offering fostering opportunities for the child may eliminate her option of continuing education. The young mother may never complete her education; this lack of education will be a barrier to her economic independence. A review of the expulsion policy would be appropriate to make it possible for adolescent or young adult mothers to return to school following the birth of a child.

It is interesting to note that most respondents said that they had received information on reproductive health. However, there are serious doubts about the accuracy of these self-assessments in view of the fact that approximately 20% and 30% of the respondents in peri-urban and rural areas, respectively, did not know that a girl can get pregnant the first time she has sexual intercourse. In addition, the findings with respect to the respondents' sexual activity and limited use of contraception pose a great deal of concern in their various communities within the areas surveyed. The main sources are friends, school and movies/videos. It appears that the subject is not offered to all students in all schools, the quality of the instruction is unknown, and friends are notoriously poor purveyors of this kind of information.

Some interesting contradictions arose from the attitudes and practice with respect to sexual behaviour and contraceptive use. Many more of the adolescents and young adults surveyed were sexually active than approved of premarital sexual activity, and many more approved of the use of contraceptives by sexually active unmarried adolescents and young adults than actually used them to prevent unintended pregnancy and sexually transmitted diseases. Of all the respondents, 20% (25% males and 16% females) approved of premarital sexual activity though 62.3% (61.5% males and 63.3% females) were sexually experienced at the time of the survey. There is some evidence in the literature that provides some explanations as to why adolescents and young adults initiate premarital sexual activity even though the majority oppose it. A number of studies point out that peer pressure, passion, proof of love and physical pleasure are some of the determining factors contributing to premarital sexual

activity. In addition, males give reasons that centre on proof of normality. By contrast, females cite duress; they may not necessarily be raped, but are forced into acceding coitus. Others cite the desire for material things that they may get as 'gifts' through sexual relationships (Buga *et al.*, 1996; Nabila *et al.*, 1996; Richter *et al.*, 1997).

The levels of contraceptive knowledge are quite high for both male and female respondents. However, contraceptive use among those who are sexually active is relatively low. Although it is believed that knowledge will always affect behaviour, this is not the case with contraception. And a large proportion of sexual activity takes place without adequate protection from unintended pregnancy or sexually transmitted diseases, including HIV infection. The condom and the pill were the most used methods and a sizable proportion of the females reported using injectables. The main reasons given by respondents who were at risk of unwanted children for non-use of contraception indicate that there is a strong need to increase family planning education and improve the distribution of contraceptives.

In view of the high level of risky sexual practice with its attendant risks of unintended pregnancies, abortions, childbearing and STD/HIV infection, adolescents and young adults should be seen as facing serious health problems. It is therefore suggested that appropriate interventions for risk reduction be put in place to address these health and social problems. Community health education aimed at behavioural change would provide adolescents and young adults with the skills necessary to make informed choices about sexual behaviour, which may eventually lead to a decline in early sexual activity, pregnancy and sexually transmitted disease.

Acknowledgments

This study was funded by Grant No. HNE 5053-G-5064-00 from the US Agency for International Development, supporting the HBCU-Ghana Fertility Research Project. The authors are deeply grateful to the interviewers and supervisors who involved themselves so enthusiastically in this project.

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