Sexual Health Experiences of Adolescents In Three Ghanaian Towns

By Evam Kofi Glover, Angela Bannerman, Brian Wells Pence, Heidi Jones, Robert Miller, Eugene Weiss and Joana Nerquaye-Tetteh

Evam Kofi Glover is manager of the Research and Evaluation Unit, Angela Bannerman is research officer and Joana Nerquaye-Tetteh is executive director, all with Planned Parenthood Association of Ghana, Accra. Brian Wells Pence is a Howard Hughes Medical Institute Predoctoral Fellow, Department of Epidemiology, University of North Carolina at Chapel Hill School of Public Health, NC, USA. Heidi Jones is staff associate and Robert Miller is senior program associate, both in the International Programs Division, Population Council, New York. Eugene Weiss is an independent consultant based in Harrington Park, NJ, **CONTEXT:** Ghanaian youth are greatly affected by widespread social change, and their reproductive health needs may differ by social group, age and gender.

METHODS: In-person interviews on sexual health issues were conducted with 704 never-married youth aged 12–24 in three Ghanaian towns. The sample included youth who were in school, in apprenticeship programs or in neither school nor apprenticeship programs (unaffiliated).

RESULTS: More than half of the respondents had ever had sexual intercourse (52%), with the adjusted odds for females being 1.6 times those for males and the odds for unaffiliated and apprenticed youth being 2.5–3.2 times those for inschool youth. The odds of having had sex in the previous month were elevated for females (2.0) and apprentices (2.7). Both sexes tended to accept violence towards women, with unaffiliated youth showing the highest level of acceptance and in-school youth the lowest. Nearly all respondents (99%) knew of condoms, but fewer than half (48%) could identify any of four elements of correct use; females and sexually inexperienced youth were the least informed. Two-thirds of respondents considered it unacceptable for males to carry condoms, and three-quarters considered it unacceptable for females. Twenty-five percent of males and 8% of females reported having had a sexually transmitted infection. One-third of sexually experienced females reported having ever been pregnant; of those, 70% reported having had or having attempted to have an abortion.

CONCLUSIONS: Adolescent reproductive health programs should be targeted to the needs of specific groups.

International Family Planning Perspectives, 29(1):32–40

Ghanaian youth today must confront the personal challenges of adolescence during a time when their country is in social and economic upheaval. Since the 1970s, economic deterioration has created social change that has profoundly affected Ghanaian families. The transformation of the rural economy from a barter system to one based on currency occurred when currency was losing its value, and rural-to-urban migration accelerated as job opportunities diminished. Social and religious institutions—which once governed values, rites of passage, marriage and the extended family—have been largely replaced by secular institutions.¹ At the same time, increases in education have helped to create a prolonged period of adolescence—a stage of life that hardly existed in traditional agrarian society.

The extent to which adolescents are affected by social changes is a source of substantial concern in Ghana, especially since 44% of the population is less than 15 years old. Policy and service organizations are increasingly focusing on perceived youth issues such as premarital sexual activity, unwanted pregnancies, out-of-wedlock births, illegal abortions, sexually transmitted infections (STIs) and high levels of HIV and drug abuse. Evidence suggests that such focusing may well be warranted: For example, according to a recent study of unmarried adolescents and young adults in the greater Accra and eastern regions of Ghana, one in five sexually active young women had ever

been pregnant, and nearly half of those had undergone an induced abortion.*

Adolescents in Ghana generally begin sexual activity in their middle to late teens: According to the 1998 Ghana Demographic and Health Survey (DHS), the median age for first sexual intercourse is 17.6 years among women aged 20–49 and 19.4 years among men aged 25–59.⁵ Eleven percent of women aged 20–49 had had sexual intercourse by age 15; 78% had had sex by age 20. Many of these women had had premarital sex as adolescents, because only 59% of women aged 20–49 were married by age 20. The contraceptive prevalence rate among women 15–19 years old is 13%. Furthermore, 9% of women aged 15–19 in urban areas and 17% of those in rural areas have begun child-bearing. This pattern of sexual initiation, contraceptive use, age at marriage and childbearing is typical of many West African countries.

There is little information on the extent to which Ghanaian youth suffer from STIs, especially HIV, and unwanted pregnancies. UNAIDS estimates that those aged 15–24 account for 6% and 9% of reported AIDS cases in males and females, respectively. The highest incidence of AIDS occurs

^{*}Abortion is illegal in Ghana except in cases of rape and incest, or when the mother is at risk of harm or the fetus is at risk of serious disease or abnormality (source: Center for Reproductive Law and Policy [CRLP], Women of the World: Laws and Policies Affecting Their Reproductive Lives, Anglophone Africa, New York: CRLP, 1997).

among 25–34-year-olds, many of whom may have contracted HIV in their teens, given the years-long incubation period between infection and the development of AIDS.⁶

Despite the wide range of concerns facing Ghanaian youth, much of the programmatic literature on adolescents has focused somewhat narrowly on knowledge, attitudes and practices related to contraceptive use. National population policy has placed a heavy emphasis on lowering the fertility rate through increased access to modern contraceptives. This policy was revised in 1994 to address broader issues, including education, gender considerations and empowerment of women.⁷

This article is based on a study conducted in the capital towns of three Ghanaian regions in 1997 by the Planned Parenthood Association of Ghana (PPAG) in collaboration with the Population Council. The study sought to assess adolescents' knowledge, attitudes and behaviors related to a wide range of reproductive health and gender issues. This article presents an overall picture of the sexual health experiences of Ghanaian youth, and examines how their experiences differ by sex, age and school or work status. We particularly focus on the differences between youth in school, youth in apprenticeship programs and those who are neither in school nor in apprenticeship programs (unaffiliated).

DATA AND METHODS

Our study took place in Takoradi, Sunyani and Tamale; each is the capital of its respective region, as well as the focal point for regional administrative and economic activities. The populations of Takoradi and Sunyani are predominantly Christian and follow the matrilineal inheritance system; Tamale is predominantly Muslim, with a patrilineal inheritance system. Takoradi is a harbor city and a common destination for migrants seeking economic opportunity. The three towns were chosen based on convenience and need: PPAG was already working in these towns, but few other organizations were offering adolescent sexual and reproductive health services. The study was intended both to inform PPAG's work and to serve as a pretest for a larger study using the same instrument.

We used a purposive sampling procedure to select 750 never-married youth (250 from each town) aged 12-24. We excluded 46 youth (44 respondents were married or divorced, one was not within the age specifications and one was omitted due to substantial inconsistencies in responses), leaving a final sample of 704. The sample was designed to gather information about three social groups of youth: those in school, those in organized apprenticeship programs (e.g., hairdressers, carpenters, masons, wayside mechanics) and unaffiliated youth. Unaffiliated youthwho are generally difficult to reach-are a floating, street-involved population that includes ice-water sellers, cart pushers, porters and vendors of audio cassettes and other small items. While the actual proportion of these youth in the general population is unknown, most observers believe that the size of this group is increasing.⁸

From each town, we chose 100 in-school youth, 100 apprenticed youth and 50 unaffiliated youth, each group stratified by sex. To select the sample of in-school youth, we randomly chose five schools from the junior secondary, senior secondary and religious schools in each town; interviewers visited each school and randomly selected the desired number of students. We selected apprenticed youth by obtaining a list of small-scale enterprises in each town, and then by grouping them by industry to ensure that all industries were equally represented. A sample of firms was randomly chosen from each industry, and apprentices were then randomly selected from each firm. For unaffiliated youth, the research team used a quota sampling method (stratified by sex) to select from adolescents encountered in commercial areas who were willing to take the time to complete the interview. Quotas were used to ensure that different categories-shoeshine boys, cassette sellers, porters and ice-water sellers—were included in the sample. The fact that interviews took place in the marketplace led to some difficulties, as many respondents were busily trying to sell their wares or services throughout the interview. Despite the logistical difficulties, all interviews were satisfactorily completed. Nevertheless, both the convenience sampling strategy and the sometimes chaotic interviewing environment may have made the responses for the unaffiliated youth in this survey less representative of the relevant target population than those for the in-school and apprenticed youth.

Our survey instrument was informed by previous research in Kenya and Nigeria,⁹ and seeks to address reproductive health issues beyond family planning, such as malefemale relations, sexism, self-esteem, and awareness and avoidance of AIDS. ¹⁰ Trained interviewers questioned respondents about their reproductive health knowledge, behaviors and attitudes. The interviews were conducted in the local language by an interviewer of the same sex as the respondent.

Because adolescents' reproductive health experiences vary substantially with age, ¹¹ variation or lack of variation in variables of interest by age-group is noted in the text. Aggregate means by sex and social group were adjusted for age using analysis of covariance. ¹² In the analysis, we compared youths' differences by town, sex, age and social group.

Using multiple logistic regression, we calculated odds ratios for youth of ever having had sex, having had recent sex (within the previous 30 days), having had more than one recent partner and agreeing that one can get sexual satisfaction without penetrative sex. As explanatory variables, these analyses include sex, age (continuous), social group, town, religion, domestic status and whether the respondent had ever had sex. All analyses described below were conducted in SPSS 8.0, except for the principal components analysis, which was conducted in STATA 6.0.

We adapted an index measuring gender role attitudes from work by Erulkar and Mensch in Kenya. ¹³ The index was constructed from responses to 10 statements with which the respondents were asked to agree or disagree: "All women should be wives and mothers"; "Boys should be

Volume 29, Number 1, March 2003

TABLE 1. Percentage distribution of Ghanaian youth by social group, according to selected characteristics

Characteristic	AII (N=704)	Social group			
	(14-704)	In school (N=297)	Apprenticed (N=267)	Unaffiliated (N=140)	
Sex					
Male	51.3	50.5	51.7	52.1	
Female	48.7	49.5	48.3	47.9	
Age					
12–14	11.8	21.5*	2.2*	9.3*	
15–17	26.8	43.5*	7.5*	28.6*	
18–20	37.7	28.3*	46.9*	40.0*	
21–24	23.7	6.7*	43.4*	22.1*	
Education					
None	7.2	0.0*	7.9*	20.6*	
Primary	9.8	0.7*	9.4*	29.4*	
Middle	51.0	48.0*	57.9*	43.4*	
Secondary	28.6	50.9*	17.3*	5.1*	
Vocational	3.4	0.4*	7.5*	1.5*	
Living situatio	n				
Both parents	40.1	58.3*	32.5*	16.4*	
One parent	21.5	19.5	24.5	20.0	
Other relative	27.5	18.5*	31.7*	38.6*	
Friend/on own	5.6	1.7*	4.9*	15.0*	
Other	5.3	2.0*	6.4*	10.0*	
Religion					
Christian	65.6	66.2*	70.4*	55.1*	
Muslim	29.7	32.1	25.8	32.1	
Other	4.7	1.7*	3.8*	12.8*	
Town					
Sunyani	33.5	33.7	34.5	31.4	
Takoradi	34.3	33.7	34.5	35.0	
Tamale	32.2	32.6	31.0	33.6	
Total	100.0	100.0	100.0	100.0	

^{*}Differences across social groups are significant at p<.05.

asked to spend as much time as girls on household duties"; "When money is scarce and a family cannot send all children to school, boys should be sent"; "Households should be headed by men"; "A mother who carries out her full family responsibilities does not have time to work outside the home"; "Girls should be allowed to decide when they want to marry"; "Children suffer when mothers work away from home"; "Girls should be allowed to select their own husband": "Husbands should share childcare and housework responsibilities with their wives"; and "Women should have the same opportunities as men to hold leadership positions in government." We coded the responses so that a higher value indicated a more traditional response; principal components analysis was used to construct a single scale from the 10 questions. We standardized the scale to range from 0 (showing less traditional views and more perceived equity between males and females) to 100 (more traditional views and less perceived equity).

RESULTS

Background Characteristics

In the overall sample, there were slightly more males than females (Table 1), because of a large disparity in the oldest age-group. Women tend to marry at a younger age than men,

and thus more women were excluded from the final sample because of marital status. Forty-two percent of sampled youth were in school, 38% were in apprentice programs and 20% were unaffiliated. In-school youth were concentrated in the younger age categories, while most apprenticed youth were mainly 18 or older. There were no substantial differences in the characteristics of youths when compared by town.

Almost all youth (93%) had attended some school, with 51% reaching middle school and 29% secondary school; of those who had never had any formal education, about half had learned to read and write through the makarantha (religious) system of education (not shown). Some apprenticed and unaffiliated youth had had only a primary school education; this proportion was significantly higher among unaffiliated youth than among apprenticed youth (29% vs. 9%).

Fewer than half (40%) of respondents reported living with both parents, but almost 90% lived with at least one parent or another relative. A greater proportion of females than males reported living with both parents (45% vs. 35%—not shown). Unaffiliated youth were the most likely to live on their own or with friends, and in-school youth were the most likely to live with both parents. Youth aged 12–14 were the least likely to live on their own, although no substantial differences were found among the other age-groups (not shown). Two-thirds of respondents were Christian, nearly one-third were Muslim and the rest were members of other religions. Unaffiliated youth were the most likely to identify with other religions (Hinduism, Buddhism and African Traditionalism).

Sexual Activity

Overall, 52% of respondents had ever had sexual intercourse (Table 2); young women were more likely than young men to be sexually experienced (56% vs. 48%). This is consistent with the lower median age at first sexual intercourse among women compared with men reported in the 1998 Ghana DHS¹⁴ and with a study of unmarried adolescents in the greater Accra and eastern regions of Ghana. ¹⁵ As would be expected, the proportion who were sexually experienced increased with age: Seven percent of 12–14-year-olds had ever had sex, compared with 29% of 15–17-year-olds, 64% of

TABLE 2. Percentage of Ghanaian youth, by sexual experience, according to social group

	All	Social group			
		In school Apprenticed		Unaffiliated	
EVER HAD SEX					
All	52.1	37.5*	64.5*	59.1*	
Males	48.2†	37.9*	59.5*	51.2*,†	
Females	56.2†	37.6*	69.3*	67.8*,†	
HAD SEX IN LAST	30 DAYS				
All	29.6	21.2*	39.2*	29.7*	
Males	24.2†	19.8*	32.9*	19.6*,†	
Females	35.2†	23.6	44.6	40.7†	

*Differences across social groups are significant at p<.05. †Differences between genders are significant at p<.05. *Note:* All percentages adjusted for age.

18–20-year-olds and 82% of 21–24-year-olds (not shown). After adjustment for age, the apprenticed and unaffiliated youth (65% and 59%, respectively) were more likely than those in school (38%) to be sexually experienced.

A similar pattern emerges for recent sexual activity. Overall, nearly one-third of all respondents reported having had at least one sexual partner in the past 30 days. Half of those aged 21–24 had had intercourse during that period (not shown). Again, women were more likely than men (35% vs. 24%) and out-of-school youth were more likely than those who were in school (30–39% vs. 21%) to have had sex in the last 30 days. Within each social group, higher proportions of women than of men had been sexually active in the past month; this difference is significant only among the unaffiliated youth.

Acceptance of nonpenetrative sexual contact was mainly restricted to respondents who had had sexual intercourse.* Sixty-one percent of respondents agreed that one can get sexual satisfaction with a partner without having penetrative sex (not shown). Among those who agreed that penetrative sex is not needed for sexual satisfaction, kissing, fondling and touching were the most frequently mentioned ways of getting such satisfaction (each about 70%); fewer youth identified practices such as mutual masturbation (17%) or oral sex (5%).

Experience with such intimate contact was almost exclusively the domain of those who had had sex. Among those who agreed that one can get sexual satisfaction without intercourse, 91% of sexually experienced youth had actually experienced one of the above-mentioned practices, compared with only 10% of respondents who had never had intercourse. The fact that such a small proportion of sexually inexperienced adolescents had had other sorts of intimate contact suggests that youth may take an "all-ornothing" approach to sexual relations. 16

In multiple logistic regression analyses, respondents who were older, female or in one of the two out-of-school groups were significantly more likely than others to be sexually experienced and sexually active (Table 3). Young women's odds of ever having had sex and of having had sex in the last month were significantly higher than those of young males (odds ratios, 1.6 and 2.0, respectively). Unaffiliated and apprenticed youth were more likely than in-school youth to have ever had sex (2.5-3.2); apprenticed youth were more likely than in-school youth to have had sex in the last month (2.7). Among respondents who had had sex in the past month, young women had about one-eighth the risk of young men of having had multiple partners. Older and sexually experienced youth were significantly more likely than others to agree that penetrative sex is not needed for sexual satisfaction (1.1 and 3.3, respectively).

Factors in the Negotiation of Sex

Gifts and coercion appear to play a substantial role in adolescent sexuality. Nearly 25% of sexually experienced female respondents reported that their first sexual experience involved rape or force, and an additional 9% said that they had

TABLE 3. Odds ratios (and 95% confidence intervals) from regression analysis assessing the likelihood for Ghanaian youth of having ever had sex, having had sex in the previous 30 days, having had multiple partners in the previous 30 days and agreeing that one can get sexual satisfaction without having penetrative sex, by selected characteristics

	Ever had sex (N=699)	Had sex in the previous 30 days (N=675)	Had more than one partner in the previous 30 days† (N=201)	Agrees pene- trative sex not needed for sex- ual satisfaction (N=610)
Age	1.53 (1.40–1.68)**	1.28 (1.18–1.39)**	1.10 (0.91–1.32)	1.10 (1.01–1.19)*
Sex Male (ref) Female	1.00 1.64 (1.11–2.41)*	1.00 1.96 (1.32–2.91)**	1.00 0.13 (0.05–0.34)**	1.00 1.21 (0.84–1.75)
Social group In school (ref) Apprenticed Unaffiliated	1.00 3.19 (2.00–5.07)** 2.49 (1.49–4.13)**	1.00 2.68 (1.63–4.40)** 1.68 (0.97–2.93)	1.00 0.94 (0.32–2.80) 1.03 (0.27–4.02)	1.00 0.70 (0.43–1.14) 0.72 (0.43–1.21)
Town Takoradi (ref) Sunyani Tamale	1.00 2.51 (1.58–3.98)** 1.01 (0.43–1.87)	1.00 2.48 (1.54–3.97)** 2.32 (1.26–4.26)**	1.00 0.67(0.23–1.98) 0.99 (0.30–3.30)	1.00 1.75 (1.13–2.69)* 0.73 (0.41–1.32)
Living situation Parent/relative (ref) Friend/on own	1.00 1.27 (0.38–4.26)	1.00 1.19 (0.66–2.13)	1.00 1.94 (0.68–5.57)	1.00 0.99 (0.56–1.78)
Religion Christian (ref) Muslim Other	1.00 0.84 (0.45–1.52) 1.67 (0.68–4.10)	1.00 1.12 (0.63–1.97) 2.27 (0.94–5.52)	1.00 0.88 (0.32–2.45) 2.80 (0.58–13.4)	1.00 0.86 (0.49–1.50) 0.74 (0.32–1.69)
Had sex No (ref) Yes	na na	na na	na na	1.00 3.33 (2.17–5.11)**

^{*}p<.05. **p<.01. †Among those who had had sex in the previous month. *Notes*: ref=reference group. na=not applicable.

been enticed or deceived (not shown). A smaller proportion of sexually experienced young men (5%) said that rape or force had played a role in their first sexual experience, but a comparable proportion (10%) reported having been enticed or deceived. In addition, one in five males who had had sex admitted to having used some sort of coercion or bribery to get sex, with the most frequent ways being money (10%), gifts (6%) and force (4%). Young men's use of coercion and bribery increased with age, possibly because their earnings rose: None of the sexually experienced 12–14-year-olds reported having used coercion or bribery, compared with 25% of 18–20-year-olds and 35% of 21–24-year-olds.

Most respondents expressed acceptance of male-dominated relationships and violence toward women (Table 4, page 36). Overall, 73% of adolescents agreed that there are circumstances in which it is acceptable for a husband to beat his wife, and 58% believed that there are justifiable reasons for a man to beat his girlfriend.† Most respondents cited lack of respect, flirtatious behavior with other men and failing to do what the man says as justifications for vi-

Volume 29, Number 1, March 2003

^{*}Respondents were asked whether they had done any of the following: kissing, fondling, mutual masturbation, fellatio and cunnilingus.

[†]All respondents were asked, "Do you think there are circumstances in which a husband can beat his wife?" and "Do you think there are circumstances in which a boy can beat his girlfriend?"

TABLE 4. Percentage of Ghanaian youth who agreed with two statements regarding violence toward women, by sex and social group

Statement	All	Social group				
		In school	Apprenticed	Unaffiliated		
A HUSBAND MAY JUSTIFIABLY BEAT	HIS WIFE					
All	73.1	68.0*	75.0*	80.0*		
Males	73.4	67.6	76.0	81.0		
Females	72.7	68.3	73.8	79.0		
A MAN MAY JUSTII BEAT HIS GIRLFRIE						
All	58.2	47.9*	64.4*	67.7*		
Males	55.9	47.1*	59.8*	68.7*		
Females	60.4	48.6*	69.2*	66.6*		

^{*}Differences across social groups are significant at p<.05. *Note*: All percentages adjusted for age.

olence; responses showed little variation by age (not shown). In-school youth were the least tolerant of violence, and unaffiliated youth were the most tolerant.

We used respondents' scores on a traditional attitudes scale—ranging from 0 (least traditional) to 100 (most traditional)—to examine the relationship between gender-based violence and gender role attitudes. Traditional gender role attitudes are strongly associated with acceptance of intimate violence. Respondents who agreed that a husband may justifiably beat his wife had a higher score than those who disagreed (52.0 vs. 44.6); the same pattern was evident for those who agreed that a man may justifiably beat his girlfriend (51.5 vs. 48.1). Males held significantly more conservative views than women, both overall (53.4 vs. 46.3) and within each social group. Residents of Tamale tended to be less traditional (43.9) than youth who lived in Tako-

TABLE 5. Among respondents who knew of condoms, percentage who knew aspects of correct use, by sexual experience, according to social group and gender

	All		In sch	ool	Appre	enticed	Unaff	iliated
	Male	Female	Male	Female	Male	Female	Male	Female
All aspects								
Sexually experienced	3.3	0.6	2.3	0.0	4.1	1.0	2.4	0.0
Sexually inexperienced	1.1	0.0	0.0	0.0	0.0	0.0	6.3	0.0
Any aspect								
Sexually experienced	79.8	48.3	81.8	60.6	75.5	48.6	87.8	38.1
Sexually inexperienced	37.1	18.5	27.9	20.2	48.7	28.6	53.1	0.0
Open carefully								
Sexually experienced	64.5	37.2	68.2	42.4	61.2	41.0	68.3	23.8
Sexually inexperienced	28.0	8.9	18.3	10.6	43.6	9.5	40.6	0.0
Squeeze top								
Sexually experienced	16.9	4.4	22.7	6.1	15.3	5.7	14.6	0.0
Sexually inexperienced	4.0	0.0	1.9	0.0	2.6	0.0	12.5	0.0
Unroll over erect penis								
Sexually experienced	79.2	46.7	81.8	54.5	75.5	47.6	85.4	38.1
Sexually inexperienced	36.0	17.1	26.0	18.3	48.7	28.6	53.1	0.0
Withdraw before loss o	f erecti	on						
Sexually experienced	12.0	5.6	13.6	3.0	12.2	5.7	9.8	7.1
Sexually inexperienced	4.6	0.0	3.8	0.0	5.1	0.0	6.3	0.0

Note: All percentages adjusted for age.

radi (52.0) and Sunyani (53.5). This is unexpected, given the strongly patrilineal social context in Tamale and the matrilineal system in the other two towns.

Reproductive Health Knowledge

Ghanaian young people have substantial gaps in their reproductive health knowledge. Only 17% (22% of females and 13% of males) correctly indicated when during the menstrual cycle pregnancy is most likely to occur. One-third of both male and female respondents did not know that it is possible for a woman to get pregnant the first time she has sex. Furthermore, substantial confusion existed about the long-term fertility implications of contraceptive use: Almost half (48%) of respondents did not know the correct answer to the question "Does using family planning inhibit future childbearing?" Sexually experienced youth were better informed than were those who had not had sex on this question (57% vs. 47%) and on when during the menstrual cycle pregnancy is most likely to occur (24% vs. 10%).

Nearly all respondents (95%) claimed awareness of at least one way to avoid pregnancy; methods mentioned most frequently were abstinence, condoms and oral contraceptives. Virtually all respondents (99%) stated that they knew about condoms; however, when asked to describe how to use a condom, only 48% could identify any of the four specific steps associated with correct condom use. Among sexually experienced youth, greater proportions of males than of females knew that the condom package must be opened carefully (65% vs. 37%), the top of the condom must be squeezed (17% vs. 4%), the condom must be unrolled over the erect penis (79% vs. 47%) or that one must withdraw before loss of erection (12% vs. 6%); the pattern was similar among sexually inexperienced youth, although the level of knowledge was substantially lower (Table 5).

Youth had fairly good information about the existence and transmission of STIs. Almost all (98%) had heard of at least one STI (not shown); the most common infections mentioned (unprompted) were HIV/AIDS (97%) and gonorrhea (68%). Most youth mentioned that intercourse (96%) and sharing needles (71%) were means of transmitting HIV, and most knew that one cannot get HIV by shaking hands or sharing utensils with an infected person. Although only 6%, when unprompted, mentioned perinatal transmission as a way of acquiring HIV, 83% agreed with the statement: "A woman who has the AIDS virus can give birth to a baby with the AIDS virus." Eighty-seven percent of respondents were aware of ways to avoid contracting STIs; two-thirds mentioned always using a condom during intercourse, and between one-third and two-fifths identified abstinence, fidelity and avoiding shared needles.

Protection Against Unwanted Pregnancies and STIs

Most respondents did not want to have children in the near future and did not view teenage pregnancies favorably. Ninety-eight percent of young women said that they wanted children, but only 15% wanted one in the next two years. Ninety-seven percent of both sexes reported that there are reasons

for teenagers to avoid pregnancy and childbirth, most commonly because the mother cannot take care of the child (81%). When asked what they considered to be good about having a child as a teenager, at least three-quarters of youth said that there is nothing good about it. Among those who did cite a benefit, the most common reasons were to have a child to love and to receive economic support in old age.

Although a substantial proportion of youth had experience using contraceptives, slightly less than half of all sexually experienced respondents reported having used a modern contraceptive the last time they had sex. Among those who had had sex in the last month, the proportion reporting contraceptive use was slightly greater (60%). Contraceptive use increased with age, but did not vary significantly by sex or social group.

Half of sexually experienced respondents had ever used a condom; there was little difference by sex or social group, although ever-use increased with age. Eighty-five percent of those who had ever used condoms knew the basics of use, compared with 41% of those who never had used them. More than three-quarters of respondents reported having obtained their last condom from a chemist shop, while only 4% had gotten it from a clinic or a hospital.

Respondents reported perceiving significant attitudinal barriers to condom use: shyness about purchasing condoms in public and from health workers was cited by 62% and 44% of respondents, respectively. Some 65% did not think it appropriate for young men to carry condoms, and 78% thought it was not appropriate for women. Further questions revealed that respondents disapproved of carrying condoms because it suggests promiscuity. Shyness about purchasing condoms tended to decrease with age, although disapproval of carrying them did not.

An issue of substantial concern is the apparent lack of communication about contraceptives among youth. Only one-quarter of the sample reported ever having discussed family planning; of these, about half said that they had spoken with friends, and 22% with a health worker. In comparison, the 1998 Ghana DHS reported that 54% of married women aged 15–49 who knew about modern contraception had discussed it with their spouse in the year before the survey. ¹⁷

Youth seemed less concerned with protecting themselves from STIs than from pregnancies. Approximately one-third of sexually experienced respondents had used something to prevent transmission of STIs (generally a condom) the last time they had sex. A greater proportion of males than of females said that they had protected themselves (43% vs. 28%). Females' responses on this point did not vary much across social groups; among males, however, those in school (55%) were more likely than apprentices (43%) and unaffiliated youth (29%) to have protected themselves.

Not using contraceptives, particularly condoms, puts adolescents at risk of unwanted pregnancies and STIs, outcomes that have been experienced by a substantial proportion of these youth. Twenty-five percent of males and 8% of females reported ever having had an STI. Slightly more than a third

(35%) of sexually experienced young women reported that they had ever been pregnant. Eighty-seven percent of young women who had experienced a pregnancy said that their last pregnancy was unwanted, and 70% said that they had had or attempted to have an abortion. Among youth who were sexually experienced, greater proportions of apprenticed (45%) and unaffiliated (32%) females than of those in school (6%) had ever been pregnant. All of the pregnancies of in-school women were unwanted, and led to abortions or abortion attempts; for apprentices, 85% of pregnancies were unwanted and 72% led to abortion or abortion attempts, compared with 92% and 62%, respectively, for unaffiliated women. Selection bias should be considered when comparing the results by social group, since some women who become pregnant may be forced to leave school.

DISCUSSION

The data presented in this article highlight several general reproductive health issues facing Ghanaian youth. They also illustrate important areas where needs differ among subgroups of the population.

The data paint a picture of a population in which premarital sexual activity is common, women are often coerced or forced into sex and both sexes tend to accept violence toward women. High levels of awareness of condoms and other contraceptives are not accompanied by widespread contraceptive use or by correct knowledge of basic condom use. Furthermore, nearly universal awareness of HIV and other STIs does not persuade youth to practice protected sex or nonpenetrative alternatives to sex, and a substantial fraction of youth experience unwanted pregnancies, abortions and STIs.

Although information on sexual practices is reportedly often difficult to obtain, participants in this survey appeared relatively open in their responses to sensitive questions. Interviewers informally reported that, while initially hesitant, many respondents indicated interest in the subject matter and said that they had never discussed these topics with anyone before. The interviewers reported that many youth wanted to know how the data would be used and appeared to desire some type of follow-up. A high proportion of youth revealed intimate sexual practices and experience with abortion, despite the fact that abortion is heavily restricted in Ghana. The openness of our sample suggests relatively high validity for the survey, but our results may not be generalizable to youth in other areas of Ghana.

Issues to Consider

Our results point to several potentially productive focus areas that could help to improve educational programs. Nearly all of the youth interviewed knew about HIV and other STIs. In addition, they had good knowledge of how these infections can and cannot be transmitted. However, youth's knowledge of several topics needs to be greatly improved: Widespread ignorance about correct condom use and the timing of a woman's fertile period ¹⁸ needs to be addressed, as does confusion about possible long-term con-

Volume 29, Number 1, March 2003

sequences of contraceptive use.

On the other hand, attitudes and social norms appear to be more important barriers to improved reproductive health than lack of knowledge. Specifically, existing norms seem to inhibit conversations about reproductive health among friends and within relationships. Therefore, youth do not learn how their peers are behaving, whether their friends approve of and use contraceptives, or what their partner knows and wants. This lack of communication is especially important in the light of research in Ghana indicating that the belief that friends use condoms significantly enhances the probability that individuals will plan on using condoms in the future. 19 In addition, the data support the view that youth seem to have mixed or negative attitudes about buying and carrying condoms. In Ghana, condoms are generally available at either low or no cost through drug stores, clinics, community-based health workers and peer educators, but social and religious barriers may constrain use when accessibility and cost do not.²⁰ Intervention programs that promote group discussion among peers, organize exercises on purchasing contraceptives and enable youth to practice communication regarding contraceptive use can help to overcome these problems. Overall, the data suggest a strong need to remove the stigma associated with purchasing, carrying and using condoms.

A number of gender issues explored in the survey have important implications for educational programming. Youth of both sexes need help in questioning underlying gender values and training in how to handle certain discriminatory situations, especially when violence is a possibility. Such programs might include a woman's right to choose whether to have sex and in which sexual behaviors she wishes to engage. Programs might also focus on the specialized skills needed to avoid coercive sex and to negotiate sexual practices and condom use.

While the data suggest that sexual intercourse is common for older unmarried youth in the survey towns, inconsistent use or nonuse of contraceptives, particularly condoms, places them at risk of unwanted pregnancies and STIs. Young women reported more sexual activity than men, probably because they tend to be in relationships with older partners who are outside of the study's age range. Among respondents who were sexually active, however, males were much more likely than females to have had multiple partners in the previous month. The findings on sexual practices reinforce the view that Ghanaian youth appear to take an "all-or-nothing" approach to sexual behavior:21 Youth who have not had sexual intercourse have had little or no experience with kissing, fondling or other nonpenetrative sexual practices. This points to the need for reproductive health education programs to emphasize safe sexual practices, such as alternatives to intercourse, and the risks of having multiple sex partners.

Differing Needs for Different Social Groups

In-school youth were the least likely to be sexually active, in part, but not exclusively, because they were younger on average than the youth in other groups. They tended to be

less tolerant of violence toward women, were more likely to use condoms and less likely to experience unwanted pregnancies. However, few knew when during a woman's cycle she is fertile. This is vital knowledge, particularly for young women, both to help them fully understand the menstrual cycle and to inform their choices on sexual behavior and contraception when they are ready to make such choices. Neither sex had much information on the correct use of condoms. While generally in need of the full range of educational interventions, in-school youth are the best prospects for true primary intervention (i.e., provision of the information and skills to make informed choices about sexual activity before most of them become sexually active).

Apprenticed youth are the oldest group in this sample, and also have the highest age-adjusted rates of sexual activity. They show relatively more knowledge than in-school youth on some reproductive health facts, such as the basics of condom use and whether a woman can get pregnant the first time she has sex; however, they are less likely than those in school to use condoms. Employers of apprenticed youth were generally very cooperative and open to the present research; they would probably be receptive to related educational interventions. Given the problems of accessibility, such programs should be coordinated with the delivery of reproductive health services. Such services might emphasize peer counseling and community-based distribution of contraceptives.

The unaffiliated youth in this sample had the least education and were most likely to be living on their own or with friends. They scored highest on the index of traditional gender-role attitudes, and were the most tolerant of intimate violence. In addition, unaffiliated youth were less likely to be sexually experienced or sexually active than apprenticed youth, although the sexually active males were more likely than sexually active apprenticed males to have had multiple partners and less likely to have used condoms. This group could benefit from programs similar to those designed for apprenticed youth, although these programs will probably be more difficult to organize and implement because of the elusive nature of the population. Programs that offer skill-building and economic assistance might be particularly attractive to members of this group.

CONCLUSIONS

Reproductive health policy and youth programs should be designed specifically for targeted youth populations; unaffiliated youth, in particular, warrant special attention. Social change in Ghanaian society is producing an increasing number of these youth, who are disadvantaged relative both to the in-school population and to apprenticed youth.

However, all groups of youth would greatly benefit from increased discussion of family planning and other reproductive health issues—both with educators and among themselves—as well as from increased access to youth-friendly services. The significant number of abortions among Ghanaian youth and the acceptance and prevalence of intimate violence are indicators of the immediate need for

action. The challenges ahead include designing, implementing and evaluating broad reproductive health programs to effectively reach different adolescent subgroups who have different life experiences and needs.

REFERENCES

- 1. National Population Council, Ghana, *Government of Ghana National Population Policy*, revised ed., Accra, Ghana: National Population Council, 1994.
- 2. Ghana Statistical Service and Macro International, *Ghana Demographic and Health Survey 1998*, Calverton, MD, USA: Macro International, 1999.
- 3. Ampomah K, Proceedings of the Adolescent Reproductive Health Summit, Accra, Ghana: National Population Council, 1996; and Planned Parenthood Association of Ghana and Population Council, An Operations Research Approach to the Development of a Cost-Effective Strategy for Strengthening Reproductive Health Among Ghanaian Youth, unpublished, 1996.
- 4. Agyei W et al., Sexual behavior and contraception among unmarried adolescents and young adults in Greater Accra and Eastern regions of Ghana, *Journal of Biosocial Science*, 2000, 32(4):495–512.
- ${\bf 5.}$ Ghana Statistical Service and Macro International, 1999, op. cit. (see reference 2).
- **6.** UNAIDS and World Health Organization, *Ghana: Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Infections: 2000 Update*, Geneva, Switzerland: UNAIDS and WHO, 2000.
- 7. National Population Council, 1994, op. cit. (see reference 1).
- **8.** Anarfi J, Vulnerability to sexually transmitted diseases: street children in Accra, *Health Transition Review*, 1997, 7(Suppl.):281–306.
- 9. Mensch BS and Lloyd CB, Gender differences in the schooling experience of adolescents in low income countries: the case of Kenya, *Population Council Policy Research Division Working Paper Series*, 1997, No. 95; Erulkar AS and Mensch BS, Gender differences in dating experiences and sexual behavior among adolescents in Kenya, paper presented at the 23rd Population Conference of the International Union for the Scientific Study of Population, Beijing, Oct. 11–17, 1997; and Weiss E, Evaluation of adolescent/youth reproductive health projects in Nigeria (and in Ghana), unpublished notes, Dec. 9, 1992.
- **10**. International Planned Parenthood Federation (IPPF), *Vision 2000: Investing in the Future*, London, UK: IPPF, 1993.
- 11. Agyei WKA and Epema EJ, Sexual behavior and contraceptive use among 15–24-year-olds in Uganda, *International Family Planning Perspectives*, 1992, 18(1):13–17; Ajayi AA et al., Adolescent sexuality and fertility in Kenya: A survey of knowledge, perceptions, and practices, *Studies in Family Planning*, 1991, 22(4):205–215; and Mensch BS, Bruce J and Greene ME, *The Uncharted Passage: Girls' Adolescence in the Developing World*, New York, USA: Population Council, 1998.
- 12. Kleinbaum DG et al., *Applied regression analysis and other multivariable methods*, third ed., Pacific Grove, CA: Duxbury Press, 1998.
- 13. Erulkar AS and Mensch BS, 1997, op.cit. (see reference 9).
- **14.** Ghana Statistical Service and Macro International, 1999, op. cit. (see reference 2).
- 15. Agyei W et al., 2000, op. cit. (see reference 4).
- 16. Erulkar AS and Mensch BS, 1997, op. cit. (see reference 9).
- 17. Ghana Statistical Service and Macro International, 1999, op. cit. (see reference 2).
- 18. Ajayi AA et al., 1991, op cit. (see reference 11).
- 19. Adih WK, Determinants of Condom Use by Young Men to Prevent HIV Infection Among Youths in Ghana, doctoral dissertation, Baltimore, MD, USA: Johns Hopkins University, Bloomberg School of Public Health, Department of International Health, 1996; and Kattende CM and Anarfi JK, The influence of perceptions on behavior: the case of condom use in Ghana, paper presented at the annual meeting of the Population Association of America, Cincinnati, OH, USA, Apr. 1–3, 1993.
- $\textbf{20.}\, \textbf{Agyei}\, \textbf{WKA}\, \textbf{and}\, \textbf{Epema}\, \textbf{EJ}, \textbf{1992}, \textbf{op.}\, \textbf{cit.}\, (\textbf{see}\, \textbf{reference}\,\, \textbf{11}); \textbf{Meekers}$

- D, The implications of free and commercial distribution for condom use: evidence from Cameroon, *Population Services International Research Division Working Paper Series*, 1997, No. 9; and Meekers D, Ahmed G and Molatlhegi MT, Understanding constraints to adolescent condom procurement: the case of urban Botswana, *Population Services International Research Division Working Paper Series*, 1997, No. 12.
- 21. Erulkar AS, Population Council, Nairobi, Kenya, personal communication, Jul. 7, 1997.

RESUMEN

Contexto: Los jóvenes de Ghana se ven muy afectados por los grandes cambios sociales, y sus necesidades en materia de salud reproductiva pueden diferir de acuerdo con el grupo social, de edad y de género a que pertenecen.

Métodos: Se realizaron entrevistas personales sobre cuestiones de salud sexual a una muestra de 704 jóvenes que nunca se habían casado, de 12–24 años, en tres pueblos de Ghana. Esta muestra incluyó a jóvenes que asistían a la escuela, a programas de aprendizaje, o que simplemente no asistían a ninguno de esos centros de formación (no afiliados).

Resultados: Más de la mitad de los entrevistados habían tenido relaciones sexuales alguna vez (52%); la razón de momios ajustada para las mujeres era de 1,6 en comparación con los hombres, y la de los no afiliados y miembros de los centros de aprendizaje eran de 2,5-3,2, en comparación con aquellos jóvenes que asistían a la escuela. Las probabilidades de haber tenido relaciones sexuales durante el mes previo a la encuesta fueron elevadas entre las mujeres (2,0) y los que asistían a los centros de aprendizaje (2,7). Aproximadamente el 25% de las entrevistadas que tenían experiencia sexual indicaron que su primera relación sexual había sido una violación o un acto forzado, y el 9% indicaron que habían sido engatusadas o engañadas; el 20% de los hombres informaron que habían recurrido a la coerción o al soborno para iniciar una relación sexual. Ambos grupos, hombres y mujeres, aceptaron que había violencia hacia la mujer y el grupo de jóvenes no afiliados presentó el nivel más elevado de aceptación, en tanto el grupo que asistía a la escuela tenía el más bajo. Casi todos los entrevistados (99%) conocían el condón, pero menos de la mitad (48%) podían identificar alguno de los cuatro elementos que corresponden al uso correcto de este anticonceptivo; las mujeres y los jóvenes con menos experiencia sexual fueron los menos informados al respecto. Los dos tercios de los entrevistados consideraron inaceptable que los hombres tuvieran condones a su disposición, y las tres cuartas partes también consideraron inaceptable que las mujeres tuvieran este método en su poder. El 25% de los hombres y el 8% de las mujeres indicaron que habían tenido una enfermedad transmitida sexualmente. Un tercio de las mujeres que tenían experiencia sexual habían quedado embarazadas; el 87% de estos embarazos eran no deseados.

Conclusiones: Los programas de salud reproductiva dirigidos a los adolescentes deberían centrar la atención en las necesidades de grupos específicos.

RÉSUMÉ

Contexte: L'évolution sociale a affecté grandement les jeunes Ghanéens, et leurs besoins de santé génésique peuvent différer selon le groupe social, l'âge et le sexe.

Méthodes: Des entrevues personnelles sur les questions de la santé sexuelle ont été menées avec 704 jeunes célibataires âgés de 12 à 24 ans dans trois villes ghanéennes. L'échantillon comprenait des jeunes scolarisés, inscrits à un programme d'apprentissage ou ni l'un ni l'autre (non affiliés).

Résultats: Plus de la moitié des répondants avaient déjà eu des rapports sexuels (52%), la cote corrigée pour les filles représentant 1,6 fois celle des garçons, et la cote corrigée des jeunes non affiliés ou apprentis représentant 2,5 à 3,2 fois celle des jeunes scolarisés. La probabilité d'avoir eu des rapports sexuels durant le mois précédant l'entrevue était élevée pour les filles (2,0) et les apprentis (2,7). Près de 25% des répondantes sexuellement expérimentées ont déclaré que leur première expérience sexuelle avait été le produit d'un viol ou d'une contrainte, et 9% ont dit avoir été leurrées ou trompées; 20% des garçons ont déclaré avoir eu recours à la ruse ou la coercition pour obtenir des faveurs sexuelles. Dans les deux sexes, la tendance était à l'acceptation de la violence à l'égard des femmes, les jeunes non affiliés présentant le plus haut niveau d'acceptation et ceux scolarisés, le moindre. Presque tous les répondants (99%) avaient connaissance du préservatif, mais moins de la moitié (48%)

pouvaient identifier l'un quelconque des quatre éléments de son usage correct. Les filles et les jeunes sans expérience sexuelle étaient les moins informés. Deux tiers des répondants jugeaient inacceptable qu'un garçon ait sur lui des préservatifs, et trois quarts considéraient inacceptable qu'une fille s'en munisse. Vingt-cinq pour cent des garçons et 8% des filles ont déclaré avoir eu une infection sexuellement transmissible. Un tiers des filles sexuellement expérimentées ont déclaré avoir été enceintes; 87% de ces grossesses n'étaient pas désirées.

Conclusions: Les programmes de santé génésique des adolescents devraient être ciblés sur les besoins et le vécu de groupes spécifiques.

Acknowledgments

The work on which this article is based was funded by the U.S. Agency for International Development, contract CCP-3030-G-00-3008-00, and by International Planned Parenthood Federation, London, UK. The authors would like to thank Annabel Erulkar and Jim Phillips for their numerous valuable suggestions, and Kofi Awusabo-Asare for his help in training the field interviewers.

Author contact: rmiller@popcouncil.org

Acknowledgment to Reviewers

The editors wish to express their appreciation to the following reviewers for their assistance in evaluating material for International Family Planning Perspectives in 2002:

William K. A. Agyei
Barbara Anderson
Gustavo Angeles
Mary P. Arends-Kuenning
Patricia E. Bailey
Anne M. Bakilana
Stan Becker
Trude A. Bennett
Ann E. Biddlecom
Deborah L. Billings
Kelly Blanchard
Shelah S. Bloom
John G. Cleland
Francine M. Coeytaux
=

Yvette Cuca
Charlotte Ellertson
Birgitta Essén
Delicia Ferrando
Andrew Fisher
Anastasia J. Gage
Bela Ganatra
Vivian F. Go
Baochang Gu
Stanley K. Henshaw
Rick Homan
Terence H. Hull
Dale E. Huntington
Jennifer A. Johnson-Hanks

Heidi E. Jones
Karungari Kiragu
Sunita Kishor
Hans-Peter Kohler
Oladapo A. Ladipo
Federico R. Leon
Ann H. Leonard
Robert J. Magnani
Michael T. Mbizvo
S. Philip Morgan
Linda A. Morison
John M. Pile
Elena Prada
Suzanne G. Prysor-Jones

Sarah M. Salway
Hosanna Soler
Ilene S. Speizer
Alan B. Spruyt
Elizabeth Thomson
Amy Ong Tsui
Ping Tu
Ronan Van Rossem
Mark VanLandingham
Ricardo Vernon
Susan Cotts Watkins
Mary Nell Wegner
Mary Beth Weinberger

Zheng Wu

John A. Ross