Adolescent Sexuality and Fertility in Kenya: A Survey of Knowledge, Perceptions, and Practices

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This article presents findings from a survey conducted in Kenya in 1985 of the reproductive health knowledge, attitudes, and practices among more than 3,000 unmarried Kenyan youth, students and nonstudents, between the ages of 12 and 19. The survey was designed to elicit information that would be useful in gauging the kinds of problems Kenyan adolescents face in order to design programs that meet their needs. The study shows that although a solid majority of adolescents appear to have received information on reproductive health, the quality of the information is generally low. Fewer than 8 percent could correctly identify the fertile period in a woman's menstrual cycle. A substantial proportion of the population surveyed, more than 50 percent, is sexually active, having initiated intercourse some time between 13 and 14 years of age, on average. In spite of a general disapproval of premarital sex (but approval of the use of contraceptives among the sexually active), most of the sexually active population—89 percent—have never used contraceptives. The many contradictions between attitudes and practices pose serious questions and demonstrate the need to reexamine the programs (and policies) that provide access to reproductive health services to adolescents in Kenya. (STUDIES IN FAMILY PLANNING 1991; 22, 4: 205–216)

A number of explanations, both social and biological, have been developed to elucidate the phenomenon of modern-day adolescent fertility and the set of circumstances that surrounds it—circumstances that are not unique to Kenya nor even to sub-Saharan Africa (Senderowitz and Paxman, 1985; Liskin, 1985; United Nations, 1989). Earlier onset of menarche among females; earlier initiation of sexual activity; a lengthening of the socially defined period of adolescence; social change and modernization; low and ineffective use of contraceptives; delayed age at marriage; and a deterioration of the traditional family-centered constraints on sexuality, have all been described as factors that appear to influence behavior in Kenya and elsewhere (Senderowitz and Paxman, 1985; Gyepi-Garbrah, 1985a; Cherlin and Riley, 1986; Liskin, 1985).

For some years, concern has been expressed about the levels of sexuality and fertility among certain groups of Kenyan adolescents (Khasiani, 1985; Gyepi-Garbrah, 1985a). By age 20, a majority of Kenyan females have borne at least one child (Gyepi-Garbrah, 1985a). Nearly three-fourths of these women are married when they give birth (Central Bureau of Statistics, 1980), though many become pregnant out of wedlock. Muraya (1985) indicates that 47.6 percent do so. Contraceptive practice is notoriously low (Central Bureau of Statistics, 1986), although there are indications that use is slightly higher among those yet to be married. Khasiani (1985), who interviewed 109 pregnant teenagers, found that 45 percent had their first sexual experience between the ages of 12 and 15, 38 percent between the ages of 16 and 18, and 17 percent at age 19 or later.

One of the most dramatic reflections of adolescent sexuality is the practice of induced abortion, which is largely, though not totally, illegal in Kenya. According to Aggarwal and Mati (1980), the incidence of abortion in Kenya "has attained the proportion of a serious public health problem." The incidence and consequences among adolescent women are totally out of proportion to their numbers in the population. Abortion is the leading cause of admission to the emergency gynecological ward at Kenyatta National Hospital in Nairobi, where 60 percent of the emergency cases are under the age of 20 (Aggarwal, 1980). Overall, young women aged 15–19 account for one-third of *all* abortion cases admitted (60 percent of which are induced outside the hospital), and more than one-

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half of all cases are reported to have serious complications, such as sepsis (Aggarwal and Mati, 1980). These women are predominantly young and unmarried. It is estimated that about one-third will return to the hospital with similar complaints because of the lack of post-abortion counseling and contraceptive services.

Concerns about the health consequences of early sexual activity go well beyond pregnancy, contraception, and abortion, however. Although the full extent of the problem of sexually transmitted diseases (STDs), particularly syphilis, gonorrhea, and now the HIV virus, is unknown, a 1981 study of gonorrhea in Nairobi placed the rate at 70 per 1,000 in the general population (Osoba, 1981). In the 1970s, Gachuhi wrote of the problems of STDs in the student population (Gachuhi, 1973). Many cases of gonorrhea were being treated with penicillin at clinics. Little is known of the current situation among adolescents, although the specter of AIDS hangs threateningly over the contemporary scene.

Abortion aside, when faced with an untimely pregnancy, young female students in Kenya leave school. Usually they do not return. The policy in Kenya is to expel pregnant schoolgirls (Khasiani, 1985). In such cases, one of the social prices of early motherhood is a truncated education. The phenomenon of early pregnancy reaches down into the primary grades. Muraya (1985) reports that 66 percent of 211 teenage mothers surveyed had become pregnant while in primary school. Eshiwani (1985) notes that "attrition rates among girls at all levels of education are high. Pregnancy is one major factor contributing to this attrition. . . over *10 percent* of female students are lost from the secondary school system every year from pregnancies." In a society in which economic advancement is linked to educational level, these dropout rates undermine, in both subtle and direct ways, the effort to involve women in the development process of the country (Khasiani, 1985). Leaving school early also affects fertility practice, which is an area of concern in Kenya, a country with one of the highest population growth rates in the world.

It is within this context that a survey concerning the sexual behavior, contraceptive practice, and reproductive health of Kenyan adolescents was undertaken in the concluding months of 1985. Although much information on adolescent sexuality and fertility in Kenya can be gleaned from a patchwork of studies done over the years, the survey reported here is a comprehensive survey of adolescents' views, perceptions, and practices. The goal of the survey was to gather information that would contribute to the development and implementation of reproductive health programs that address the needs of Kenyan adolescents.

Study Design and Survey Methodology

The survey utilized the Family Health International/Pathfinder adolescent fertility questionnaire, thus making the data comparable with surveys conducted in other countries (such as Liberia, Nigeria, The Gambia, Tanzania, and Zimbabwe). The questionnaire collected information from more than 3,000 unmarried Kenyan men and women aged 12–19. It focused on their sociodemographic characteristics, levels of sexual activity, knowledge and use of contraceptives, incidence and outcomes of pregnancy, and knowledge and sources of information on reproductive health topics. The survey was conducted in a total of nine districts, of which seven were rural and two were urban.[1] The six major towns of Kenya were included;[2] other smaller towns were grouped together by province to form individual strata.

The districts were chosen using a purposeful method of selection intended to represent the eight major ethnic groups of rural and urban Kenya.[3] The selection of clusters in each sampling unit was made by simple random sampling. The National Sample Survey and Evaluation Programme (NASSEP I), designed by the Central Bureau of Statistics, was used to select the clusters within the districts.

Thirty-six male and female interviewers were recruited from the Nairobi metropolitan area to conduct the survey over a period of three months from October to December 1985. The questionnaires were coded in the field by the interviewers, thereby facilitating the data entry process. After the data were entered into the computer, a program was utilized to validate them and to detect and correct errors in the data entry process. A statistical software package (SPSS) was utilized for analyzing the responses and producing the tables for this report.

Results

Characteristics of the Study Population

For this analysis, the number of valid cases consisted of 1,513 females (45.6 percent) and 1,803 males (54.4 percent), for a total of 3,316.[4] For the purposes of analysis, these cases were further divided into 12 subgroups based on gender, age, and student status, and for nonstudents, the level of education achieved.[5] Although the subgroup containing younger nonstudents with a high level of education had very few respondents, this subgroup was included in the analysis in order to be consistent with previous studies conducted in other countries (such as Liberia, Woods et al., 1985 and Nichols et al., 1987; The

Gambia, Kane et al., 1988; Nigeria, Nichols et al., 1986; and Tanzania, Mbunda et al., 1987). The breakdown of valid cases for analysis by age, gender, and student status is shown in Table 1. Overall, 81 percent of the respondents are students (78 percent of the female respondents and 84 percent of the male respondents).

For each of the age/sex groups, the majority of respondents were raised in rural areas, in proportions that approximate the general population distribution in Kenya. The one departure from this pattern is found among the older nonstudents with higher education, more of whom have been raised in Nairobi or other cities.

Ideal Age at Marriage and at First Birth, and Desired Number of Children

Responses pertaining to the mean ideal ages for marriage and childbearing, and the number of children desired, are reflected in Figure 1. Overall, the ideal age for women to marry is 22, according to female respondents, and 20.4, according to male respondents. Women believed men should marry at age 25.5, while men believed they should marry at age 24.5. Nonstudents with a low level of education consistently reported a lower ideal age at marriage than did students and higher educated nonstudents. The mean ideal age for a woman to have her first child also followed this pattern. Overall, the ideal age for the birth of the first child closely matched the ideal age at marriage, suggesting a preference for immediate childbearing once married.

Responses on the desired number of children revealed a pattern indicating that men with a low level of education preferred to have more children. The ideal family size ranged from 3–5, with the overwhelming majority of subgroups citing 4–5 children as ideal.

Knowledge and Sources of Information on Reproductive Health, Sexual Behavior, and Contraception

A large majority of respondents in each subgroup claimed to have received information on reproductive health (Table 2). Overall, 68 percent of the males and females responding to this question stated that they had received such information. Among those who said they had received information, the main sources appear to have been school, friends, and a same-sex relative, in that order.

Among the nonstudents, it would appear that the principal source of information is their friends, except for the younger female nonstudents with a low level of education, who indicate their sources in the following order: female relative, school, and friends. In all the student subgroups, over 40 percent stated that they had received information from school. Thus, with respect to less educated nonstudents, a traditional cultural pattern tends to prevail. Among these nonstudents, same-sex relatives and friends play more important roles in providing access to reproductive health information, whereas students and higher educated nonstudents tend to receive this information first from school, then from friends.

In an effort to assess the quality of the reproductive health information received by adolescents, respondents were asked to identify the fertile period in a woman's menstrual cycle. In spite of the high percentage of respon-

Table 1 Number and percentage of respondents according to age, sex, and age group, by educational status, among adolescents in Kenya, 1985

Characteristic	Educational status: Student	Nonstudent (low education)[a]	Nonstudent (high education)[b]	Total
Age (year)				
12	5 (.2)	0 (0)	0 (0)	5 (.1)
13	450 (13.6)	18 (.5)	2 (.1)	470 (14.1)
14	536 (16.2)	24 (.7)	2 (.1)	562 (16.9)
15	540 (16.3)	88 (2.7)	2 (.1)	630 (19.0)
16	417 (12.6)	74 (2.2)	6 (.2)	497 (15.0)
17	322 (9.7)	51 (1.5)	23 (.7)	396 (11.9)
18	237 (7.1)	87 (2.6)	34 (1.0)	358 (10.7)
19	193 (5.8)	108 (3.3)	97 (2.9)	398 (12.0)
N and (%)	2,700 (81.4)	450 (13.6)	166 (5.0)	3,316 (100)
Females				
12–15	766 (23.1)	76 (2.3)	2 (.06)	844 (25.5)
16–19	412 (12.4)	169 (5.1)	88 (2.6)	669 (20.2)
N and (%)	1,178 (35.5)	245 (7.4)	90 (2.7)	1,513 (45.6)
Males				
12–15	765 (23.1)	54 (1.6)	4 (.12)	823 (24.8)
16–19	757 (22.8)	151 (4.5)	72 (2.2)	980 (29.5)
N and (%)	1,522 (45.9)	205 (6.2)	76 (2.3)	1,803 (54.4)

Note: In this and subsequent tables: Number of cases = number of cases on which percentage is based; 0 = 0 cases; Dash (—) = not applicable.

[a] Never attended school or attended elementary school only. [b] Completed elementary school or a higher level.

Figure 1 Ideal ages at marriage and at first birth, and desired number of children, according to Kenyan adolescents, 1985

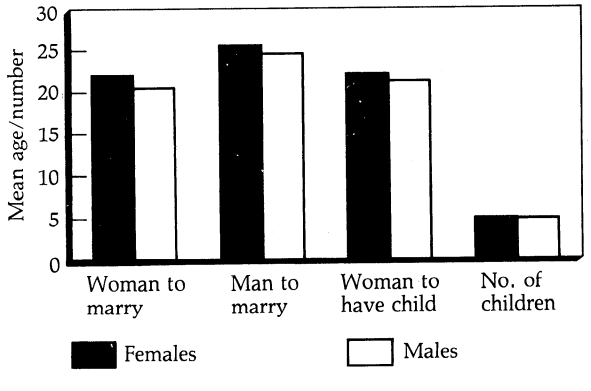


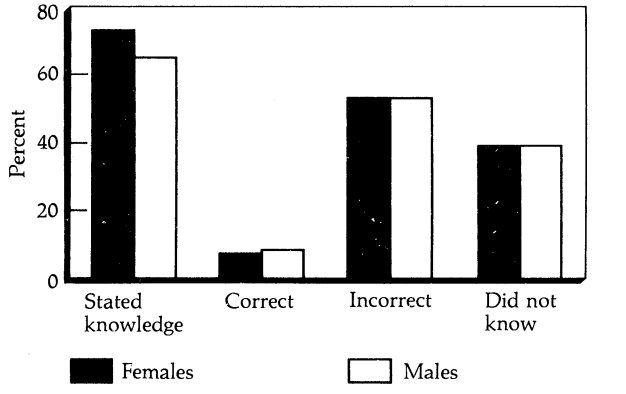
Table 2 Percentage of respondents who received information on reproductive health, and sources of information, according to sex, age group, and educational status, among adolescents in Kenya, 1985

Characteristic	Ages 12–15			Ages 16–19			Total
	Student	Nonstudent (low ed)	Nonstudent (high ed)	Student	Nonstudent (low ed)	Nonstudent (high ed)	
Females							
Received info. on reproductive health	59	75	0	88	91	93	72
(N)	(721)	(72)	(2)	(412)	(163)	(86)	(1,456)
Received information from:							
Mother	7	9	0	7	7	10	7
Father	1	0	0	1	0	3	1
Female relative	6	35	0	6	22	3	10
Male relative	.2	2	0	1	0	0	.5
Friends	20	23	0	22	31	26	23
School	47	31	0	43	30	31	41
Printed materials outside school	5	0	0	9	3	3	6
Media	2	0	0	2	0	3	1
Other	12	0	0	10	7	22	11
(N)	(404)	(52)	(0)	(316)	(145)	(72)	(989)
Males							
Received info. on reproductive health	48	42	100	77	75	100	65
(N)	(735)	(50)	(4)	(737)	(142)	(70)	(1,738)
Received information from:							
Mother	3	0	0	6	4	0	4
Father	2	10	0	5	8	0	4
Female relative	4	0	0	1	8	0	2
Male relative	6	14	50	3	11	7	6
Friends	23	52	50	24	45	29	27
School	45	14	0	43	13	21	38
Printed materials outside school	13	0	0	11	2	29	11
Media	1	10	0	3	0	0	2
Other	4	0	0	5	9	14	5
(N)	(329)	(21)	(4)	(534)	(106)	(56)	(1,050)

dents who stated that they had received information on reproductive health, Figure 2 shows that the majority of the respondents, in all subgroups, either responded incorrectly or stated that they did not know. In fact, in none of the subgroups did the proportion of correct responses exceed 11 percent. The highest percentages of incorrect responses came from the older age group for both sexes (53–73 percent incorrect versus 22–44 percent incorrect in the younger age group). It appears that for both sexes, the younger age group was more likely to admit that they did not know the answers than to risk answering incorrectly.

Among the very few who answered correctly (Table 3), the primary source of information among 16–19-year-olds tended to be school (40 percent of males and 65 percent of females), while the second source was friends (12 percent of females and 29 percent of males). However, younger males (aged 12–15) received this information primarily from friends (51 percent) and secondarily from school (22 percent). Overall, the sources reported by the females ranked as follows: school, friends, and family; the sources reported by the males ranked as: friends, school, and printed materials received outside of school.

Figure 2 Stated knowledge and demonstrated knowledge of the fertile period, Kenyan adolescents, 1985



Another series of questions was asked to help further evaluate the quality of the reproductive health information. Table 4 presents the results of five questions relating to the occurrence of pregnancy. Only in the older age group and only for two questions (douching and urination after intercourse) did more than 50 percent of respondents know that pregnancy could occur in spite of these practices. Otherwise, substantially fewer than 50 percent of respondents knew that pregnancy could occur at first intercourse, without female orgasm, or if the couple practiced withdrawal. Overall, only a slight majority of males and females answered from one to two (out of five) of these questions correctly. The lack of accuracy shown by these responses is similar to that in other studies conducted in Nigeria, Liberia, The Gambia, and Tanzania (Nichols et al., 1986; Nichols et al., 1987; Woods et al., 1985; Kane et al., 1988; and Mbunda et al., 1987). Friends,

Table 3 Percentage of respondents with correct information on monthly fertile period, according to source of information, by sex and age group, among adolescents in Kenya, 1985

Information source	12–15	16–19	Total
Females			
Family	10	12	11
Friends	35	12	22
School	55	65	61
Printed materials outside school	0	12	7
Media	0	0	0
(N)	(40)	(52)	(92)
Males			
Family	18	10	14
Friends	51	29	40
School	22	40	31
Printed materials outside school	10	22	16
Media	0	0	0
(N)	(63)	(63)	(126)

Table 4 Percentage of respondents who know the conditions under which pregnancy can occur and percent distribution of correct responses, according to sex, age group, and educational status, among adolescents in Kenya, 1985

Knowledge	Ages 12–15			Ages 16–19			Total
	Student	Nonstudent (low ed)	Nonstudent (high ed)	Student	Nonstudent (low ed)	Nonstudent (high ed)	
Females							
Know that pregnancy could occur:							
At first intercourse	20	30	0	22	21	11	21
Without orgasm	31	22	0	26	30	26	29
If practice withdrawal	23	32	100	29	31	16	26
Despite douching	32	49	0	53	52	52	42
Despite urination after intercourse	38	46	0	53	62	58	46
Percent distribution of correct responses							
0	29	29	0	16	16	14	23
1–2	50	30	100	54	46	70	51
3–4	22	38	0	30	38	17	26
All 5	.2[a]	.3[a]	0	.4[a]	0	0	.3
(N)	(766)	(76)	(2)	(412)	(169)	(88)	(1,513)
Males							
Know that pregnancy could occur:							
At first intercourse	19	19	0	27	25	28	23
Without orgasm	39	30	0	45	31	22	40
If practice withdrawal	22	15	0	28	18	33	25
Despite douching	45	40	100	62	62	61	54
Despite urination after intercourse	49	37	100	65	55	81	57
Percent distribution of correct responses							
0	23	26	0	8	15	6	15
1–2	49	59	100	49	61	56	51
3–4	27	15	0	40	22	39	32
All 5	2	0	0	3	3	0	2
(N)	(765)	(54)	(4)	(757)	(151)	(72)	(1,803)

Note: Percent distribution does not always total 100 because of rounding.
[a] Based on only two cases.

Table 5 Percentage of respondents with knowledge of selected contraceptive methods, according to sex, age group, and educational status, among adolescents in Kenya, 1985

Methods	Ages 12–15			Ages 16–19			Total
	Student	Nonstudent (low ed)	Nonstudent (high ed)	Student	Nonstudent (low ed)	Nonstudent (high ed)	
Females							
Pill	40	49	0	68	63	80	53
IUD	11	5	0	24	16	64	18
Condoms	17	25	0	44	33	57	29
Foam	6	3	0	14	7	21	9
Diaphragm	7	5	0	15	13	33	11
Withdrawal/rhythm	14	14	0	27	25	44	20
Native medicine	15	8	0	19	18	18	16
Other	5	5	0	10	8	11	7
Any modern method[a]	44	51	0	73	66	86	57
No method known	45	38	100	24	27	17	35
(N)	(766)	(76)	(2)	(412)	(169)	(88)	(1,513)
Males							
Pill	40	30	100	70	55	89	56
IUD	8	0	50	19	9	61	15
Condoms	23	15	100	56	40	86	41
Foam	8	0	0	20	12	39	14
Diaphragm	10	0	0	28	8	36	18
Withdrawal/rhythm	17	2	25	31	14	44	26
Native medicine	14	0	0	31	13	19	20
Other	5	0	0	13	5	17	8
Any modern method[a]	48	30	100	79	60	92	63
No method known	36	54	0	15	24	3	25
(N)	(765)	(54)	(4)	(757)	(151)	(72)	(1,803)

[a] Includes knowledge of one or more of the following: pills, IUD, condoms, foam, and diaphragm.

printed materials, and same-sex relatives were primary sources of information in these countries as well.

Table 5 shows that oral contraceptives, condoms and withdrawal/rhythm were the most widely known methods of contraception, and in that order, among both males and females. The majority of respondents were familiar with modern contraceptive methods (57 percent of the females and 63 percent of the males had heard of at least one modern contraceptive method). Older students and nonstudents with a high level of education were more likely than the others to be familiar with such methods.

A larger percentage of the men (41 percent) than the women (29 percent) were familiar with condoms. The IUD was better known among older than younger females, but was best known among older male and female nonstudents with a high level of education. Among the older male students, an equal percentage (31 percent) cited knowledge of native medicine and knowledge of withdrawal or rhythm as a means of birth control. Thirty-five percent of the females and 25 percent of the males had no knowledge of any method listed, and did not cite any alternative method.

Attitudes Toward Premarital Sex, Contraceptive Use, and Pregnancy Termination

As Table 6 shows, the majority of respondents (65 percent) disapprove of premarital sex. This finding is similar to findings in The Gambia, but contrasts with the results found in Liberia and Nigeria, where the majority of adolescent respondents approved of premarital sex (Kane et al., 1988; Woods et al., 1985; and Nichols et al., 1986). All subgroups except one (older nonstudent males with a high level of education) show more than 50 percent disapproving of premarital sex, but disapproval decreases with age. Of those respondents approving of premarital sex (primarily the older population), roughly one-half approved if the couple is engaged to be married and one-half approved of premarital sex without restriction (except for the older females). The older males and females tend to be more flexible in their attitudes, with 22–37 per-

Table 6 Attitudes toward premarital sex, contraception, and abortion, according to sex, age group, and educational status, among adolescents in Kenya, 1985

Attitudes	Percent						
	Ages 12–15			Ages 16–19			
	Student	Nonstudent (low ed)	Nonstudent (high ed)	Student	Nonstudent (low ed)	Nonstudent (high ed)	Total
Females							
Approve premarital sex:							
If engaged	14	20	0	15	13	21	15
Without restriction	11	19	0	23	37	22	17
Disapprove	76	61	100	63	50	57	68
(N)	(683)	(70)	(2)	(328)	(139)	(65)	(1,287)
Favor contraception for sexually active unmarrieds	75	81	100	86	75	92	80
(N)	(500)	(53)	(2)	(308)	(121)	(71)	(1,055)
Would recommend abortion for unmarried girl	6	4	0	5	4	5	5
(N)	(690)	(72)	(2)	(389)	(157)	(80)	(1,390)
Males							
Approve premarital sex:							
If engaged	14	14	0	22	23	22	18
Without restriction	15	12	0	25	22	30	20
Disapprove	72	74	100	54	52	48	63
(N)	(686)	(43)	(2)	(606)	(108)	(46)	(1,491)
Favor contraception for sexually active unmarrieds	82	41	100	89	66	93	83
(N)	(583)	(34)	(2)	(588)	(119)	(56)	(1,382)
Would recommend abortion for unmarried girl	8	10	0	9	12	6	8
(N)	(720)	(50)	(4)	(696)	(137)	(68)	(1,675)

cent in favor of premarital sex without restriction, compared with 12–19 percent in the younger age group. Overall, males are more likely than females to approve of premarital sex (37 percent versus 32 percent, respectively).

Table 6 shows that a large majority of respondents are in fact in favor of contraceptive use among unmarried, sexually active persons (83 percent of the males and 80 percent of the females). Only the male nonstudents with lower education showed some reluctance to favor the use of contraceptives by unmarried couples. Almost 50 percent of the older nonstudent males (with low education) approve of premarital sex, but only 66 percent of them would approve the use of contraceptives. Only 41 percent of the younger males of the same educational subgroup favor the use of contraceptives. These findings pose a significant problem when placed in the context of the increase in teenage sexuality, pregnancy, and sexually transmitted diseases.

Although the adolescents surveyed tended to favor contraceptive use for unmarried people, when asked whether they would recommend abortion to a young unmarried woman who did not have plans to marry, very few said they would do so. The highest percentages of respondents recommending abortion—a mere 12 percent—were among the male nonstudents with a low level of education in both age groups.

Sexual Behavior

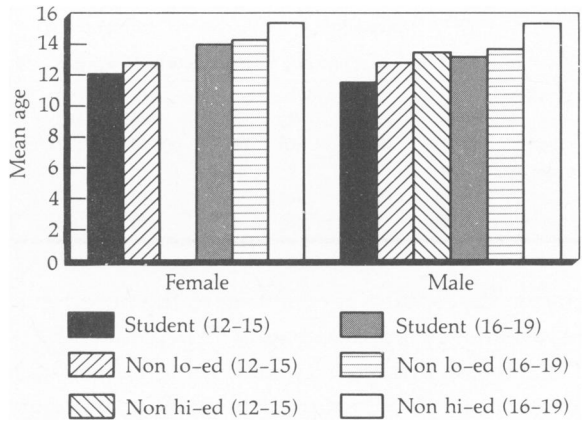
Table 7 shows that a bare majority of the total population (51 percent) who responded to the question regarding sexual experience had previously had sexual relations. In the older subgroups, 46–97 percent of the respondents were sexually experienced, with the highest percentages reported in the male and female nonstudent subgroups.

The age at first intercourse ranged from 11 to15 years old, with a mean age of 13 for males and close to 14 for females (Figure 3). As might be expected, the majority

Table 7 Percentage of respondents ever sexually active, mean age at first intercourse and frequency of intercourse among the sexually active, according to sex, age group, and educational status, among adolescents in Kenya, 1985

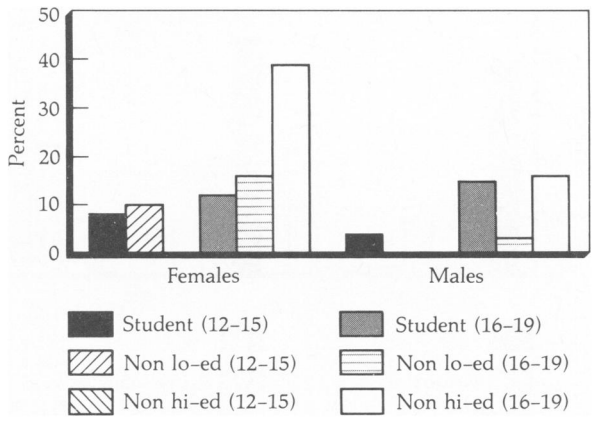
Sexual activity	Ages 12–15			Ages 16–19			
	Student	Nonstudent (low ed)	Nonstudent (high ed)	Student	Nonstudent (low ed)	Nonstudent (high ed)	Total
Females							
Never sexually active	79	40	100	54	20	26	61
Ever sexually active	21	60	0	46	80	74	39
(N)	(743)	(72)	(2)	(392)	(159)	(82)	(1,450)
Mean age at first sex (years)	12.1	12.8	—	14.0	14.3	15.4	13.6
(N)	(156)	(43)	(0)	(179)	(127)	(61)	(566)
Frequency of intercourse							
<4 times/year	6	8	0	19	25	22	13
About once/month	5	35	0	19	34	23	15
More than once/month	3	3	0	1	11	10	4
Sexually active, frequency not reported	7	14	0	6	10	20	8
(N)	(743)	(72)	(2)	(392)	(159)	(82)	(1,450)
Males							
Never sexually active	60	61	0	25	9	3	38
Ever sexually active	40	39	100	75	91	97	62
(N)	(692)	(46)	(4)	(707)	(139)	(64)	(1,652)
Mean age at first sex (years)	11.6	12.8	13.5	13.2	13.7	15.3	13.0
(N)	(279)	(18)	(4)	(530)	(127)	(62)	(1,020)
Frequency of intercourse							
<4 times/year	12	20	0	22	17	19	17
About once/month	11	11	50	25	41	34	21
More than once/month	9	9	0	18	27	28	15
Sexually active, frequency not reported	7	0	50	10	7	16	9
(N)	(692)	(46)	(4)	(707)	(139)	(64)	(1,652)

Figure 3 Age at first sex among Kenyan adolescents, 1985



Note: Female nonstudents (12–15) with high education = 0 cases.

Figure 4 Sexually active adolescents who have used contraceptives, Kenya, 1985



Note: Male and female nonstudents (12–15) with high education = 0 cases; Male nonstudents (12–15) with low education = 0 cases.

of the younger population in this study had never had sexual relations. Almost 80 percent of the older male students had had sexual relations, and among the male nonstudents, the percentage was over 90 percent. Among the older female nonstudents, roughly 80 percent had had sexual relations.

Of those who are sexually active, the nonstudents consistently reported a higher frequency of sexual activity than did the students, with 18–41 percent of older males reporting having sexual relations once a month or more. Over one-third of the less educated nonstudent females, in both age groups, reported having sexual relations about once a month.

Contraceptive Use

Whereas attitudes toward the use of contraceptives by unmarried people were generally favorable, in practice, only 11 percent of sexually active respondents reported ever having used contraceptives. Figure 4 shows that fewer than 20 percent in every subgroup were ever-users, with the exception of older female nonstudents with a high level of education, 39 percent of whom reported having ever used contraceptives.

Information regarding which methods of contraception were currently being used was unavailable for analysis. However, the 1989 Kenya Demographic and Health Survey (KDHS) gives some insights into this matter. Only 2 percent of all women aged 15–19 currently use modern methods of contraception, and an additional 6 percent currently use traditional methods. Table 8, which is based on the Kenya DHS, presents the percent distribution of all women and currently married women in the 15–19 age group, by current contraceptive method. The data indicate that while married teenagers who use contraceptives tend to rely primarily on the pill, only 13 percent of married teenagers use any method of contraception and only 7 percent use modern methods.

The reasons for not using contraceptives given by the sexually active respondents in our study are presented in Figure 5. Among those specifying a reason, the majority of respondents in all subgroups cited lack of information as the primary reason for nonuse, generally followed by difficulty in obtaining contraceptives. However, many of those interviewed failed to record any reason at all. Safety concerns were also cited as a reason for nonuse, primarily

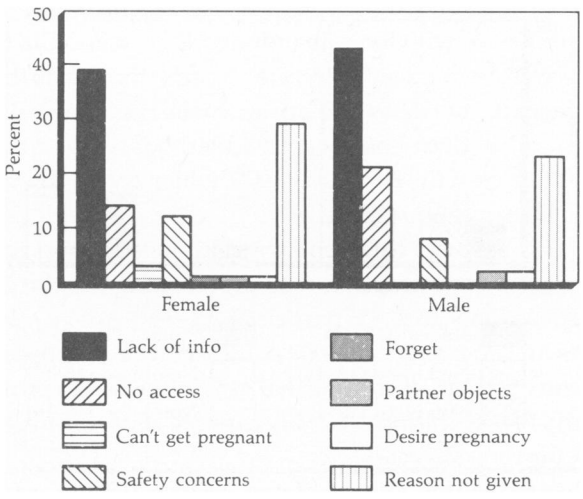
Table 8 Percentage distribution of all women and currently married women aged 15–19 according to current use of contraceptive methods, Kenya, 1985

	Percent	
Methods used	**All women**	**Currently married women**
Not using a method	**92.5**	**87.0**
Using a method[a]	**7.5**	**13.0**
Pill	1.3	5.1
IUD	.3	1.3
Injection	.1	.3
Diaphragm/foam/jelly	0.0	0.0
Condom	.1	0.0
Female sterilization	0.0	0.0
Periodic abstinence	4.8	6.1
Withdrawal	0.0	0.0
Other	.8	.3
Total	**100**	**100**
(N)	(1,497)	(276)

[a] Of all women 15–19 using a method, 1.8 percent are using modern methods and 5.7 percent are using traditional methods. Of all currently married women 15–19 using a method, 6.7 percent are using modern methods and 6.3 percent are using traditional methods.

Source: Data are derived from the Kenya Demographic and Health Survey, 1989.

Figure 5 Reasons for not using contraceptives among sexually active adolescents in Kenya, 1985



among the older age group. In fact, a greater percentage of older female nonstudents noted safety concerns before supply difficulties, whereas there was little difference between these responses for the older male nonstudents. In Liberia, Nigeria, and Tanzania, where the majority of sexually active adolescents were also not practicing contraception, lack of knowledge of contraceptives was also the primary reason cited for nonuse. (Woods et al., 1985; Nichols et al., 1986; Nichols et al., 1987; and Mbunda et al., 1987).

Pregnancy and Pregnancy Outcomes

Only 293 women, or 52 percent of the sexually active women, answered the questions concerning pregnancy. These 293 respondents are derived from an analysis of the entire female population in this study, as it was found that even fewer (112 cases) of the sexually active female population responded to these questions. This disparity indicates that some respondents may not have considered themselves to be sexually active at the time of the interview, but had been sexually active in the past. Other studies have shown that adolescents may say they are not sexually active if they currently do not have a partner, or for reasons of privacy, or as a reflection of social and cultural norms. They may be even more reluctant to disclose the occurrence of a pregnancy. Therefore, the following statistics must be viewed with caution, because they may not be representative of the sexually active female population. Nevertheless, they are disturbing enough to warrant further research and analysis.

Table 9 Percentage of female respondents who were ever pregnant and percentage who had an abortion, Kenya, 1985

	Ages 12–15			Ages 16–19			
		Nonstudent			Nonstudent		
Status	Student	(low ed)	(high ed)	Student	(low ed)	(high ed)	Total
Ever pregnant	48	83	100	45	50	50	49
(N)	(135)	(12)	(2)	(84)	(44)	(16)	(293)
(Missing cases)	(631)	(64)	(0)	(328)	(125)	(72)	(1,220)
Had an abortion	25	0	0	29	0	0	12
(N)	(16)	(10)	(0)	(7)	(16)	(2)	(51)
(Missing cases)	(49)	(0)	(2)	(31)	(6)	(6)	(94)

Among the females responding to the question concerning pregnancy, approximately 50 percent (145 cases) stated that they had been pregnant. Table 9 shows that in all the nonstudent subgroups, 50 percent or more of the respondents reported a pregnancy and, while the rate is lower among the students, some 45 percent of 16–19- year-old students and 48 percent of 12–15- year-old students also reported a pregnancy. While these figures may not be representative of the overall female adolescent population, they are not surprising given the extremely low proportion of ever-users of contraception found in this survey (15 percent of sexually active females aged 12–19), and in the 1989 KDHS (15 percent of all women aged 15–19).

Data regarding the outcome of the pregnancies were also incomplete; however, 25–29 percent of the ever-pregnant students responding to the question on pregnancy outcome said they had had an abortion.

Although the few reported abortions correlate with the attitudes stated toward abortion, it is likely that actual practice may be quite different. This study shows that contradictions exist between the attitudes and practices of adolescents with respect to premarital sex, the use of contraceptives, and probably the issue of abortion as well. While 65 percent of the respondents do not approve of premarital sex, it was found that 51 percent were sexually experienced. Further, over 80 percent of the population surveyed were in favor of contraceptive use for sexually active teenagers, yet only 11 percent of the sexually active respondents had ever used contraceptives. Therefore, we speculate that abortion may be far more prevalent, but the respondents may have been reluctant to admit to such practice due to cultural and legal issues.

Discussion

The major findings from this survey provide some interesting insights into the question of adolescent sexuality and fertility in Kenya. We shall touch on some of these below.

It would appear that the attitudes of this generation with regard to age at marriage, age at the birth of first

child, and desired number of children are changing; at least they differ from previously known figures on practice in Kenya. For example, the ideal age at marriage is in excess of 20 for women and is nearly 25 for men; the ideal age to have the first child is in excess of 20; and the ideal number of children is 4–5. Both the KFS (1977–78) and the KCPS (1984) showed that nearly three-fourths of all women interviewed were married between the ages of 15 and 19. The World Bank estimates that one-half are married by age 19 (World Bank, 1986). The latest fertility figures indicate that the average Kenyan woman gives birth to 8.1 children, with a majority giving birth for the first time before they reach age 20 (Population Reference Bureau, 1989; and Gyepi-Garbrah, 1985a). These shifts in attitudes, which support older ages at marriage and smaller families, appear encouraging and may be the first glimpse of the views of this generation. They may bear out Caldwell's observation: "It seems improbable—and has yet to be demonstrated—that any society can sustain high fertility beyond two generations of mass schooling" (Caldwell, 1980).

A majority of respondents in all subgroups said that they had received information on reproductive health. There are serious questions about how accurate those self-appraised assessments are, however. Less than one in 10 of the respondents could correctly identify the fertile period in a woman's monthly reproductive cycle—the much-used gauge for measuring the adequacy of reproductive health education. Only about half of those surveyed knew that a pregnancy could result at first intercourse, without an orgasm, and despite the practice of withdrawal, douching, or urination after intercourse. This lack of knowledge raises important issues, given some of this study's findings concerning sexual activity and nonuse of contraceptives. But it is important to fix attention for the moment on the sources of information. The leading sources of information are school and friends (even 31 percent of female nonstudents indicated that schools were a leading source). Moreover, the majority said they would prefer to receive this information at school, because they believed it would be presented correctly.

Whatever the present mechanism for placing reproductive health information within the reach of adolescents, it would appear to be of limited success, and friends and peers are notoriously poor as purveyors of this kind of information. Interestingly, however, more younger males appear to have received correct information from their friends. Among some groups, particularly females, relatives, but not necessarily parents, played an active role; this appears to be one of the legacies of the traditional system for conveying sex-related information.

The majority of survey respondents were acquainted with at least one modern method of contraception, but more than one-third of the females and one-quarter of the males could not name one. Most of these were in the 12–15 age group. Those aged 16–19 are much better informed. Moreover, knowledge appears to rise with increased education. Those who have abandoned their schooling tend to have a lower response rate. Nearly three-fourths of students in the 16–19 age group, male and female alike, know of modern contraceptive methods; this parallels the findings of the KFS and KCPS, which were 73 percent and 70.8 percent, respectively.

The disparity between correct knowledge and actual practice of contraception is so great that it sets the challenge for the future. Of particular interest will be the designs for programs that convey information to those who are out of school, assuming that new initiatives to provide family life education (FLE) are capable of performing the task for those in school.

At this point, a series of paradoxes begins to appear. Perhaps they are not wholly unanticipated. Many more of the adolescents surveyed are sexually active than approve of premarital sexual experience, and many more approve of the use of contraceptives, if young people are sexually active, than actually use them to prevent unintended pregnancy.

Between 60 and 65 percent disapprove of premarital sexual relationships, although 51 percent (62 percent of males and 39 percent of females) reported having had sexual relations. Naturally, the percentages sexually active rise with age. More than three-fourths of female nonstudents are sexually active, as are more than 90 percent of their male counterparts. The mean age at first sexual experience is at or around 13 for both males and females, indicating that for many, the earlier a thorough exposure to reproductive health education is given, the better.

By comparison, the KCPS noted that in Kenya, "There is considerable use of contraception among never-married women...." (KCPS, 1984). "Considerable" is an overstatement. Very few of those in the present survey who are sexually active—11 percent overall—reported ever having used some form of contraception. Ten percent of males and 15 percent of females did so. These figures are considerably lower than the rates reported in other sub-Saharan African countries where similar surveys have been conducted, such as Tanzania, Liberia, Nigeria, and the Gambia (Mbunda et al., 1987; Woods et al., 1986; Nichols et al., 1986; Nichols et al., 1987; and Kane et al., 1988). They paralleled, however, the contraceptive use rates presently estimated for Kenya, about 16 percent. The KFS and the KCPS surveys found contraceptive use rates among never-married women aged 15–24 to be 18 percent and 14 percent, respectively—of these, however, only 3 percent and 2.3 percent used modern methods. The more recent KDHS (1989) survey places the current use

rate for married women aged 15–19 at 13 percent, of which about half—6.7 percent—are modern methods.

Lack of information and lack of access are the two principal reasons for nonuse of contraceptives given by the adolescents surveyed. Granting access to contraceptives for unmarried but sexually active adolescents is currently opposed in Kenya by policymakers, parents, community leaders, and even many service providers. If those two issues could be resolved, however controversial it may be to do so, more than 50 percent of those not practicing contraception might become users. There is a haunting additional feature to all this. Most research overlooks the fact that most adolescents are sexually active only sporadically from the time of initiation. The response to questions on ever-use of contraceptives will always differ from the response to questions on current use; current use will only represent those currently sexually active. The important programmatic goal should be to have adolescents use contraceptives to avoid unintended pregnancy whenever they are sexually active, however sporadic their activity may be.

Of those women who responded to the question concerning pregnancy, nearly half indicated that they had experienced a pregnancy. The percentage is slightly higher among nonstudents. Recourse to abortion, overall, appears to be quite low, compared with findings in some of the other African countries. About one in 10 of those adolescents who became pregnant admitted to having had an abortion. But there are some subtleties here that merit attention. None of the nonstudents who responded to the question reported having had an abortion. On the other hand, 25 percent of the 12–15-year-old students and 29 percent of the 16–19-year-olds reported having sought an abortion. This stark difference is probably a reflection of the double-edged practice of expelling schoolgirls who get pregnant. Those who are now nonstudents carried the pregnancy to term, having abandoned their schooling; those who are still in school sought to terminate the pregnancy so that they could remain in school. This has been, for many years, a confirmed practice in other countries of the region (Akingba and Gbajumo, 1969; Ayangade, 1982; and Ampofo, 1970). The desire for education may well be the driving force behind abortion practice among adolescents in Kenya.

A Final Word

Our findings highlight the evident need to seek out and to use a variety of approaches that will increase young people's knowledge about reproductive health matters, with a view toward reducing the incidence of unwanted pregnancy in the adolescent population. Toward this end, the series of questions posed by Gyepi-Garbrah (1985a) in his important study must be addressed. They are:

1 Should programs offering sex and family life education, including information on contraception, be expanded to reach all adolescents, both in and out of school?

2 Should clinics and other contraceptive providers institute special programs to reach certain groups of sexually active adolescents, such as students, young marrieds, and those that have given birth or had an abortion?

3 Should contraception, generally, be made more accessible to all sexually active adolescents?

4 Should family planning outreach programs be initiated among groups in which the incidence of illegally induced abortion is high?

5 Should pregnant students and teenage mothers be encouraged to continue their education?

6 Should the public health campaign against STDs and AIDS include contraceptive advice and services aimed specifically at adolescents?

These are all challenging questions. Those who design and implement health care policies and programs in Kenya need to provide the answers. There is evidence that this has begun to occur. For some years, the National Council of Churches of Kenya and the Family Planning Association of Kenya (FPAK), leading nongovernmental organizations, have been attempting, in modest ways, to provide family planning information and education. Further, an official "family life education" curriculum intended to reach the school-going population has been approved for use in schools. The FPAK has recently undertaken a pilot program aimed at young people who are not in school.

The issue of whether to give contraceptives to sexually active single youth remains controversial, as it is almost everywhere in the world. Only at the university level do students have access to contraceptives through the health services. There is much to be done. Neither the popular debate nor discussions at the program or policy level have been completely resolved, even though unintended pregnancies, illegal abortions, and other social and health ills continue to dog adolescents and confound officials in Kenya. Consequently, the urgency of resolving some of these issues grows as the shadow cast by AIDS lengthens. The nature of the discussion may change and the heretofore ignored connection between adolescent sexuality and contraceptive practice may finally be seri-

ously focused upon. The longer it takes to provide answers to the questions, the more difficult it will be to mount realistic programmatic responses.

Notes

1 Districts included Machakos, Meru, Nyeri, Kajiado, Baringo, Kisumu, Kakemega, Nairobi, and Mombasa.

2 Towns included Nairobi, Mombasa, Kisumu, Nakura, Eldoret, and Thika.

3 Ethnic groups included Meru, Kikuyu, Kamba, Luhya, Luo, Kalenjin, Mijikenda, and Masai. The largest representation was among the Luhya, at 24 percent.

4 Of a total of 3,543 respondents, 227 cases were excluded from analysis due to inconsistencies in the data on gender (84); student status (91); and ages above or below the 12–19 age group (52).

5 "Low education" refers to those respondents who never attended school or who attended school but did not attend beyond the elementary level. "High education" includes those who attended some secondary school or a higher level.

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