

EVER-USE OF CONTRACEPTIVES AMONG SEXUALLY EXPERIENCED KENYAN SECONDARY SCHOOLS GIRLS

By Pat Youri, MD, Anthony N. Kamau, and Dr. Florence Muindi, Family Health Unit, Department of Community Health, African Medical and Research Foundation (AMREF), P.O. Box 30125, Nairobi, Kenya

Abstract

A nationwide KAP study was conducted in September 1992 to establish aspects of Adolescent Female Health and Sexuality including contraception among girls attending secondary schools in Kenya. Using randomising and standard cluster sampling statistical procedures, 10,314 girls from 17 of Kenya's 42 districts were selected and the girls voluntarily completed a self-administered questionnaire. Among 10,010 respondents whose data was analyzed, 3436 (34.3%) reported having had at least one sexual intercourse in the past. Of the sexually experienced girls, 8.5% had this experience by the age of 10 years and by 16 years, 75% of them had acquired this experience. The ever-used rate of contraception was found to be 17.6% i.e. 575 out of 3265 sexually experienced girls had ever-used contraceptives. Majority of the girls who had ever-used contraceptives (72%), used the following modern contraceptives: oral pills - 47%, IUDs - 10%, diaphragms - 8% and injectables - 7%. The remaining 28% used "other methods". About 1% of girls who had ever-used contraceptives, did so when they were 14 years or younger. The ever-used rate of condoms by male sex partners of respondents was also enquired into and the following responses were obtained: never used condom - 51%, sometimes used condom - 22.5%, and always-used condom - 26.5%.

Introduction

In the midst of paucity of solid information on adolescent sexuality in Kenya (Gyepi-Garbrah, 1985) and the changing phase of the African adolescent culture, it would appear no such shortages exist on hypotheses about female adolescent sexuality and sexual behaviour. Despite attempts at providing plausible biological and social reasons for current levels of adolescent fertility worldwide (Senderowitz and Paxman, 1985 and UN 1989), there exists an impression that parents, teachers, counsellors and others interested in or concerned about teenage sexuality in Kenya lack the relevant tact, ingenuity, and accurate information necessary in the handling of adolescent sexuality in part because little is understood about adolescent culture in a continent undergoing rapid demographic transition.

This study was therefore conceived as the first in a series of important nationwide studies on the topical issue of adolescent sexuality in Kenya. The study was designed as a nationwide KAP survey to test the following commonly held hypotheses on female adolescent health and sexuality in Kenyan secondary schools that: i) the age at first sexual intercourse among female adolescents is below 15

years for at least 17% of female adolescents, ii) the incidence of unprotected sexual intercourse in female adolescent is higher than 80%; iii) the biological, socio-cultural, and religious, as well as environmental differences influence female adolescent sexual behaviour; iv) female adolescents resent societal prescriptions for their sexuality; v) female adolescents view sexual relationships with males as beneficial or valuable to themselves, and vi) female adolescent health seeking behaviour is unknown to health care providers.

Objectives of Study

The aim of the study was to document accurate nationwide information which will contribute to the formulation of appropriate policies and programs on adolescent female health, sexuality, sexual behaviour and their consequences. The main objectives of this nationwide KAP study in Kenyan secondary schools were to:

- i) document the common types of self-reported morbidity among female adolescents;

Pat Youri, MD is Director, Community Health Dept and Head, Family Health Unit, Anthony N. Kamau is Biostatistician and Research Officer, and Dr. Florence Muindi is Medical Officer MCH/FP, both of Family Health Unit, AMREF, Nairobi, Kenya.

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- ii) determine the level of knowledge about adolescent female health and sexuality;
- iii) determine the pattern of health seeking behaviour among adolescent females attending Kenyan secondary schools;
- iv) document attitudes towards adolescent female sexuality;
- v) establish the magnitude, consequences, and effects of sexual activity among adolescent females; and
- vi) document the age at first coitus among adolescent high school girls.

Each district generally represented a different tribe. With at least 596 girls chosen from each district, the entire sample size was 10,314.

3. Thirdly, within each district all the schools formed the sampling frame. A representative number of students were recruited from each school using standard cluster sampling procedures. A list of schools for each district was obtained from the Ministry of Education.

Survey Methodology

Study Population

The study was based on Kenya secondary school female adolescents in forms I-IV during the study period (Sep. '92).

Sampling Design

Seventeen (17) districts were selected for the study on the basis of ethnicity using the Kenya Population Census, 1979 Vols. I & II of the Central Bureau of Statistics. (The 1989 Kenya National Census Report was not published at the time of this survey). The resident population in these districts come from the main ethnic groups i.e. ethnic groups with a population of at least 100,000 people in the country. Efforts were made to capture girls from Embu, Giriama, Kalenjin, Kamba, Kikuyu, Kisii, Luhya, Luo, Maasai, Meru, Mijikenda, Somali, Swahili, Taita, Taveta, Teso, and Turkana ethnic groups.

The sampling plan was as follows:

1. Firstly, it was assumed that the sampling design would use randomizing procedures. Therefore, the sample size calculated was based on this assumption. The precision was $\pm 3\%$ of the true population estimate, 95% of the time and the sample size per unit of analysis was calculated thus:

$$1.96^2 [pq/d^2] = 1.96^2 (0.168 \times 0.832 / 0.03^2) \\ = 0.5369 / 0.0009 \\ = 596 \text{ per unit of analysis}$$

where

- p = the proportion in the target population estimated to have a particular characteristic.
- q = 1.0 - p
- d = degree of accuracy desired, set at 0.05

2. Secondly, the next level of sampling was the district. Seventeen districts were selected in order to ensure an equitable representation of Kenya's major tribes.

Questionnaire Administration

Confidentiality and highly skilled and committed personnel were the two major factors that contributed to the successful implementation of this important phase of the survey.

About 10 research assistants, mainly young females with a sociology background from the universities in Kenya, were recruited and trained. The training was conducted in three stages mainly on completing unanimous and confidential questionnaires, conducting focus group discussions, filing unstructured and open questions, responding to written informal questions, answering structured questions, and leading discussions of a general nature.

To ensure confidentiality, the questionnaires were transported to and from the schools in sealed boxes. Before filing the questionnaire in their classrooms and in the presence of research officers in the emphasized that only girls willing to complete the questionnaire honestly should do so otherwise they were made to feel free to leave if they so wished. However, most of the girls opted to participate. A total of 10,314 girls filled out the questionnaires fully and a number of them then voluntarily participated in the focus group discussions which were conducted by the research officers.

Data Management and Analysis

The responses from the questionnaire were entered into personal computers using Dbase III+ and then translated into Statistical Package for Social Sciences (SPSS) for data analysis. The analysis done on the data were:-

1. Frequency distributions
2. Cross-tabulations
3. Chi-square tests
4. Relative risk analysis

The survey findings were presented in cumulative curves, bar charts, pie charts, and tables. In addition, some of the findings were also presented as text, and as much as possible interpretations of

the results and graphic presentations were undertaken.

This paper presents but a very small data from this survey and concentrates mainly on sexual activity and the ever-use of contraceptives among the respondents who reported ever having had sexual intercourse.

Results

Selected profiles of respondents

The age range of respondents was between 12 and 24 years with a mean age of 17.21 years. Eighty-nine percent (89%) of respondents were aged between 14 and 19 years. The median age for the study population was 17 years with a mode of 17 years also. The mean age at menarche for the respondents was 14.35 years with a standard deviation of 1.35 years and a mode of 14.00 years.

About 60% of respondents were from four main ethnic groups of Kikuyu, Luo, Kalenjin, and Luhya and 86% were Christians. At the same time of study 68% of the girls were attending mixed schools and 32% were in girls-only schools; 63% were boarders and 33% were day-scholars. The sample of schools studies comprised 41% government, 31% harambee, 21% mission, and 5% private schools. About 67% of respondents reported repeating at least one class and virtually all the repeat episodes (96%) occurred in primary school. Only 13% of girls rated themselves as academically A material and 42% thought they were B even though 68% of all respondents wished to attain university level education. On future career aspirations, nursing, secretarial jobs and law were the most popular choices.

During the 10 years preceding this survey more than half (58%) of respondents predominantly lived in rural areas, 25% in urban areas and 17% in both urban and rural area. Eighty-one percent (81%) regularly spent their school holidays with one or both parents. About 94% of the girls' parents were married, 4% were divorced, and 1% never married at the time of the study. About 15% of respondents had a sister who became pregnant whilst at school.

Nearly three quarters of the respondents (72%) did not know the correct fertile days in the menstrual cycle. About 45% have very wrong knowledge of the fertile days of the menstrual cycle and 27% did not have any knowledge at all on this issue. Only 28% of the girls knew that pregnancy was likely to occur if sexual intercourse took place at mid-cycle.

Prevalence of sexually-experienced girls among respondents

Among 10,010 girls who reported their sexual experiences to the survey, 3,436 girls (34.3%) had ever had sexual intercourse in the past and 65.7% had never had sexual intercourse at the time of the survey. These findings are shown on table 1. The frequency of sexual intercourse for each respondent was not inquired into at this survey.

Nationwide surveys on the prevalence of sexually experienced adolescent girls in sub-sahara Africa are few (Gyepi-Garbrah, 1985a). In a Nigerian study cited in *Reproductive Health: Global Issues Vol 3*, 43% of girls aged between 14 and 19 years reported ever having sexual intercourse. Much concern has been expressed in the past regarding the high level of adolescent fertility in Kenya (Khasiani, 1985) and the fact that by the age of 20 years, majority of Kenyan adolescent females would have had at least one child (Gyepi-Garbrah, 1985b). Whilst many researchers in the field of adolescent sexuality in Kenya agree that Kenya's high adolescent fertility rate, found by one survey to be 150/1000 women (Maggwa ABN, 1987), is related to high sexual activity among adolescents accompanied by low contraceptive use (Odongo F and Ojwang S.B.O, 1987) the prevalence of sexually experienced adolescent girls tend to vary widely. Much of these variations have to do with research designs. In a survey limited to Nairobi city and an adjacent rural area, 24% of urban and 58% of rural female adolescents were found to be sexually active (Ondogo, F and Ojwang S.B.O. 1990). Similarly Kiragu found that 16% of primary and 25% of secondary school girls were sexually experienced in Nakuru district - a rural district in the Rift Valley Province of Kenya (Kiragu, K, 1989). Perhaps the only study in Kenya comparable to this one was a large nationwide KAP survey covering 3000 student and non-student youths of both sexes which found that 51% of the youths between 15 to 19 years of age were sexually active (Ajayi A.A. et al, 1985) this survey finding that 34.3% of adolescent female in secondary schools in Kenya were sexually experienced in nationwide but has limitation of referring only to girls in secondary schools.

Table 1: Prevalence of sexually experienced girls among respondents

Ever-had sexual intercourse?	Number	Percent
Yes	3,436	34.3
No	6,574	65.7
Total	10,010	100.0

The mean age at first coitus for those girls who reported ever having had sexual intercourse was 14.8 ± 2.7 years. Both the median age and the mode were 15.0 years. Table 2 shows the age at first coitus for 3,194 whose responses to the age at first coitus were analyzed. As high as 8.5% of sexually experienced girl had this experience by the age of 10 years. By 16 years 75% of sexually experienced girls had had their first coitus. Nearly all sexually-experienced girls had had their first coitus by the age of 20 years.

Table 2: Age at First Coitus

Age (Years)	Frequency	Percent	Cummulative Percent
5	24	0.8	0.8
6	34	1.1	1.8
7	18	0.6	2.4
8	48	1.5	3.9
9	49	1.5	5.5
10	100	3.1	8.5
11	88	2.8	11.3
12	140	4.4	15.7
13	231	7.2	22.9
14	402	12.6	35.5
15	628	19.7	55.1
16	623	19.5	74.6
17	483	15.1	89.8
18	230	7.2	97.0
19	76	2.4	99.3
20	16	0.5	99.8
21	2	0.1	99.9
22	2	0.1	100.0

The classes at which the girls reported having their first coitus were determined using responses from 3,385 sexually experienced girls. Nearly half (47.7%) of the sexually experienced girls had their first coitus in primary school. For girls who had their first coitus in secondary school, 23.3% had this experience in form 1, 15.5% in form 2, 9% in form 3, 1.6% in form 4, and 2.9% at some other level of the education ladder.

Prevalence of ever-use of contraceptives among girls who have ever-had sexual intercourse

This survey documented that 17.6% of 3,265 sexually-experienced girls had ever-used contraceptives. Table 3 shows these findings. More than 80% of the sexually-experienced girls have engaged in unprotected sex in the past.

In Kenya, surveys with national outlook on adolescent female contraception are very few. The Kenya Contraceptive Prevalence Study of 1984 which found that among girls aged 15-19 years, only 8% had ever-used contraceptives and a study on Adolescent Sexuality and Fertility in Kenya (Ajayi et al 1985) which found 15% of sexually active females between 12 and 19 years had ever used contraceptives are truly nationwide surveys. Other surveys have tended to be highly selective with very small sample sizes such as Njoroges 1984 study of 184 University of Nairobi female undergraduate students where 22.3% were found to be using contraceptives or to be geographically limiting and therefore not nationwide such as Lema's 1987 study of 1751 adolescent secondary school girls which reported 5.5% contraceptive ever-use rate among sexually active girls and a similar study by Maggwa in 1987 which found 2.6% of adolescent girls had ever used contraceptives.

Table 3: Rate of Ever-use of contraceptives among sexually experienced girls

Ever-Used Contraceptives	Frequency	Percent
Yes	575	17.6
No	2690	82.4
Total	3265	100.0

In relation to future profession the highest ever-use rate of contraceptives was found among aspiring lawyers (22.8%) and the lowest among teaching aspirants (13.1%). About 22% of girls whose parents had divorced, 18% of girls whose parents were currently married, and 12% of girls whose parents never married had ever used contraceptives. Urban girls had the highest ever-use rate of contraceptive(21.1%), followed by urban-rural girls (20.4%), and lastly rural girls (15.3%). Also about 1% of girls below the age of 14 years had ever-used contraceptives.

Contraceptives which were commonly used by female adolescents who reported ever-using contraceptives

The commonest contraceptive which was used by girls was the oral pill. Other contraceptive methods

which were commonly used were the intra-uterine contraceptive device, the diaphragm, and injectable hormone contraceptives. These findings are shown in Table 4. Some studies have indicated that the most popular of the contraceptive methods used by adolescents are safe days (Kenya Fertility Survey 1977-78, Njoroge 1984, Lema 1987) and the pills (Ajayi et al 1985, Gyepi Garbrah 1985b).

Table 4: Commonly used contraceptives

Contraceptive Method	Frequency	Percent
Pill	261	47.4
IUDs	59	10.3
Diaphragm	44	8.0
Injectable	37	6.7
Other	152	27.6
Total	551	100.0

Condom-use among male sex-partners during sexual intercourse with girls who said they were sexually experienced

This study documented much unsafe sex practice even in the age of an AIDS epidemic. Nearly 47% of sexually experienced girls reported that their male sex-partners had never used condoms during sexual intercourse with them. Nearly a quarter of girls did not know whether their male sex partners used or did not use condoms during sexual intercourse. About 20% reported their sex-partners sometimes used condoms and 8% said their sex partners always used condoms during sexual intercourse with them. These findings are shown in Table 5.

Table 5: Condom use among male sex partners of sexually active girls

Condom use n=3070	Percent
Never-used	46.9
Sometimes used	20.6
Always used	8.1
Don't know	24.4
Total	100.0

Discussion

In general terms although it is correct to describe the sexual and reproductive behaviour of many societies

in Sub-Sahara Africa as characterized by early marriages and/or early childbearing, Reproductive Health, Global Issues Vol.3), this pattern may be changing significantly now. The existence of sexually active adolescents in and out-of marriage has also been acknowledged for sometime now. Parents teachers, policy makers, and religious leaders have always wished that teenagers particularly the adolescent female in school should not engage in sexual intercourse. Many reports however continue to indicate that teenage girls in school are actively engaged in sexual intercourse in Kenya (Ajayi et al 1985, Lema 1987, Maggwa, 1987, Kiragu,1989, Odongo and Ojwang 1990). This report confirms what many have acknowledged already - that sexual activity among Kenyan secondary school girls is continuing unabated. This is occurring inspite of efforts by parents and religious leaders among others that these adolescents should lead sex-free lives until they are matured physically and are married. It is evident from this survey that at least one out of every three female adolescents in secondary schools are unable to practice what parents are religious leaders ask of them i.e. to abstain from sex. It is gratifying to note that two out of every three girls however are able to abstain from sexual intercourse whilst at school.

Among sexually active adolescent females, a number of them have used contraceptives to protect themselves against pregnancy (Njoroge 1984, Kenya Contraceptive Prevalence Study 1984, Lema, 1987, Maggwa 1984, Ajayi et al 1985, Odongo and Ojwang 1990). This survey supports earlier findings of the use of contraceptives by sexually active adolescent females in Kenyan secondary schools and would seem to suggest a move towards the choice of modern contraception typified by the pill (Ajayi et al 1985) away from traditional contraception mainly the safe period (Njoroge 1984, Lema 1987, Kenya Fertility Survey 1977-78) as the preferred method of contraception.

For ill or for good, teenage girls in secondary school are engaging in sexual intercourse today. It is also equally true that some of these sexually active girls are using contraceptives to prevent unwanted pregnancies. Parents do not like these situations. Neither do many people including religious leaders and other opinion leaders in society. The challenge to parents, teachers, religious leaders and to many others is: what should be done with adolescent girls in school who will not or cannot abstain from sex inspite of all the efforts that are being made to encourage them to lead sex-free lives? What can be done to return them to sexual abstinence? Is it realistic to expect all teenagers to abstain from sex whilst at school? If it is not realistic, may it be acceptable to do a damage-control and adopt systems that will reduce the risks of unwanted pregnancies and of contracting STDs including AIDS

following unprotected and unsafe sex. These are the challenges of our time. Posterity will judge us by what we do now or do not do now for teenage schools girls who continue to be sexually active or who suffer from unwanted effects of unsafe and unprotected sexual intercourse.

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