Gender Differentials in Adolescent Sexual Activity and Reproductive Health Risks in Cameroon

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ABSTRACT

This paper examines gender differentials in adolescent sexual activity and reproductive health risks in urban Cameroon. The results show that males become sexually active at an earlier age than females, but that age at first intercourse is declining among females. Peer influences encourage early sexual initiation, but being enrolled in school delays it. Many youths, especially males aged 18–22, engage in risky sexual practices, including exchanging gifts or money for sex and having multiple partners. Although most youths have tried condoms, current use has remained low, suggesting that its use is inconsistent or that it varies by partner. Data on abortions and STDs highlight the need for additional and better programmes that specifically address adolescent and young adult reproductive health problems. (Afr J Reprod Health 1999; 3(2):51-67)

RÉSUMÉ

Les différentielles selon le sexe dans les rapports sexuels entre les adolescents et les risques de la santé reproductive dans les villes urbaines du Cameroun. Ce document examine les différences de comportement sexuel entre les adolescents et les adolescentes, dans les centres urbains du Cameroun, ainsi que la question de leur santé reproductive. D'après les résultats, les adolescents deviennent sexuellement actifs à un plus jeune âge que les adolescentes, mais l'âge auquel les adolescentes ont leur premier rapport sexuel est sur le déclin. Beaucoup de jeunes, plus particulièrements les jeunes hommes, agés de 18 à 22 ans, pratiquent des activités sexuelles dangereuses, y compris l'échange de cadeaux ou argent pour le sexe et, ont des partenaires multiples. Bien que de nombreux jeunes aient essayé le port du préservatif, le taux d'usage actuel est encore bas, fait qui indique un usage irrégulier ou qui varie sclon les partenaires. Les données sur les avortements et les MST mettent en lumière la nécessité de créer des projets nouveaux et plus adaptés qui tiennent compte des problèmes de santé reproductive des adolescents et des jeunes adultes. (Rev Afr Santé Reprod 1999; 3(2):51-67)

KEY WORDS: Adolescents, sexual behaviour, reproductive health, Cameroon

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Introduction

Literature on sexual behaviour in sub-Saharan Africa indicate that young men and women often exhibit different patterns of sexual behaviour. In many African societies, young men and women have different interests, motivations and strategies for engaging in premarital sexual relationships. 10,36 Young women enter into sexual relationships for various reasons including the enhancement of their marriage prospects, 10,19,31 proving their fertility to their future husbands, 14,18,25 and for financial benefits.3,7,10,13,16 Men on the other hand are more likely to engage in sexual relationships before marriage for sexual experience and sexual satisfaction. Having multiple partners is often a means for a young man to gain social status and respect among his peers. 10,31 Because of these differences, young men and women have different patterns of sexual behaviour, and hence, they are exposed to different reproductive health risks.

Premarital sexual activity of young African men and women is associated with increasingly evident reproductive health problems. First, sexual activity outside marriage and multi-partnership are closely associated with sexually transmitted diseases (STD) including HIV. Second, pregnancies that occur in an unstable, socially disapproved sexual union may lead females to seek abortion, which is often performed under unsafe conditions. In such a context, more research is needed to gain better insights into the sexual and reproductive health behaviour of unmarried young African males and females.

The purpose of this paper is to examine, using Cameroon as a research setting, gender differentials in adolescent sexual activity and reproductive health risks, as well as their determinants and consequences. More specifically, this paper documents how young men and women in Cameroon vary in the way they conduct their sexual lives, as well as in the reproductive health risks they take. Gender differentials in the pattern of sexual initiation, number of regular and casual sexual partners, and condom use are considered. The paper also examines factors affecting male and female patterns of sexual and reproductive health behaviour. Finally, the study evaluates and contrasts the health consequences of the sexual activity of both males and females, including the prevalence of STDs and abortion.

Review of Literature

In Cameroon, traditional attitudes towards premarital sexual activity varies across ethnic groups. 1,2,4,15,20,28,39 Today, sexual activity before marriage tends to be the norm among both females and males, except among the Islamic groups. 1,2,8 Nevertheless, in most societies there is a double standard regarding the tolerance of sexual activity of young women compared with that of men; there is no expectation that young men remain celibate before marriage, nor is any value placed upon the fidelity of married men, particularly when away from home. 1,2,12 Indeed, having multiple partners is a source of pride among young males. However, having multiple partners is often considered inappropriate for young females. 10

Qualitative data from Yaoundé suggest that levels of sexual activity among adolescents may be affected by the family environment and the example set by parents and older siblings, exposure to the media and peer pressure in the school.^{1,2,10} However, one of the driving forces behind adolescent sexual activity is believed to be economic gain, especially for girls. The exchange of gifts between lovers is a cultural norm in Cameroon (at least in Yaoundé and in the East). Sex is perceived as an activity where the woman gives and the man receives. The male lover is therefore seen as a debtor and in return for his partner's sexual services he is expected to support her or to provide her with food, gifts, or money.

Within this cultural context, women are more likely than men to use sexual activity as a means of getting money. Because of the economic crisis, poor girls are tempted to initiate sexual activity at an early age for financial benefits. Although the exchange of sexual favours for money is most common in urban areas, rural adolescents take advantage of it as well. Some rural young girls go to the city at the end of the month (when salaries are paid) to visit their urban-based boyfriends, and such behaviour is sometimes condoned by the girls' parents. 1,2

Reportedly, the phenomenon of semi-prostitution is widespread in the urban areas of Cameroon, 15,24,35 and it typically involves young single women who have another principal daily activity (for example, students, maids, professionals, or women working in bars or hotels) and who engage in prostitution occasionally as a side activity. Songué³⁵ noted an increase in semi-prostitution among schoolgids and students. Sexual activity for financial purpose starts around puberty when students are still in high school, and at the university level the phenomenon becomes widespread. However, semi-prostitution among students is generally not a question of survival. These are predominantly children of white-collar parents who hope to get presents from their wealthy partners. Such presents include jewelry, dresses, books and cash. Although some young men meet older wealthy women who in return invite them to restaurants, provide them with pocket money, or help to finance their education, this phenomenon is said to be much less common.35

In addition to such economic incentives, various social factors motivate adolescents to become sexually active. In many African societies, adolescents become sexually active because they want to have children. Children are a source of pride and social status, even if one is not married. 9,15 The latter is particularly important for women. Although it is preferable to have children out of wedlock, an unmarried girl may improve her chances of marriage by demonstrating that she is able to have children.1,2,20

Health Consequences of Adolescent Sexual Activity

Sexual activity of young men and women is associated with important reproductive health risks. Maternal mortality and pregnancy-related complications occur disproportionately at early ages and at first deliveries. Very young mothers, especially those below 15 years old, are at higher risk of pregnancyrelated complications such as heamorrhage, obstructed labour, fistulas and eclampsia than those above. 17,27 Such reproductive health problems stem from the mother's physiological immatunity.

Other negative health consequences arise from social condemnation of the context in which pregnancy takes place. For example, in a context in which premarital pregnancy is not always welcomed, especially when it terminates a girl's education, abortions are on the increase.6,11 In Cameroon, it is estimated that 18 per cent of all adolescent pregnancies are terminated through abortion.²² Illegal abortion rates are highest among unmarried adolescents, especially students. 5,29,30,32,38 Abortions are particularly dangerous to young single women because they are more likely to resort to unsafe illegal or self-induced abortions and to postpone abortion longer, compared with older women. This is as a result of financial problems and fears about a lack of confidentiality. 27,30 Complications resulting from abortion are multiple and include perforation of the uterus, bladder, hemorrhage, and sometimes death. 21,34 In Cameroon, 32 per cent of emergency hospital admissions at the principal maternity hospital for obstetric complications are due to abortion-related issues. 21

Extra-marital sexual activity and multi-partnership are also closely associated with sexually transmitted diseases including HIV. Recent trends in the later age at marriage and the increasing levels of unmarried sexual activity have extended the period of exposure to STDs, increased the proportion of adolescents exposed to these risks, and increased the likelihood of sexual activity with multiple partners. AIDS studies in three African countries estimate that women aged between 15 and 25 years account for 70 per cent of the 3,000 women who contract HIV everyday, and of the 500 who die from it.33,* In a study of sexually active high school students in the Fako District of Cameroon, onequarter of females and one-third of males reported having had a sexually transmitted disease.23

Data

The analyses presented in this paper are based on data from the 1996 Enquête sur la Santé Réproductive des Adolescents au Cameroun (ESRAC-96), which was conducted by l'Institut de Recher-

STDs such as gonorrhea and chlamydia also often lead to pelvic inflammatory disease which is the major cause of secondary sterility. In fact, a high incidence of STDs underlies the historically high levels of infertility in many countries of Central Africa. 40 For example, in Cameroon 63 per cent of infertility is secondary sterility and over 85 per cent of female infertility results from infection.²¹

che et des Etudes de Comportement (IRESCO) for Population Services International (PSI). This survey was conducted to provide baseline data for a quasi-experimental research design to evaluate the effectiveness of an adolescent reproductive health programme implemented by PSI.³⁷ The survev was implemented in Edéa and Bafia. Edèa is the location where the intervention was scheduled and Bafia was selected as the control location. The town of Edéa, located in Littoral Province, is an important industrial centre. Edéa used to attract many labour migrants, but this influx of labour migrants has diminished considerably due to the economic recession. Today, Edéa has an estimated population of roughly 60,000 inhabitants; the population is multi-ethnic but the dominant ethnic groups are the Bakako and Bassa. Bafia is located in Centre Province and it has a smaller population comprised mostly of Bafia and Yambassa peoples. Contrary to Edéa, Bafia has virtually no industry, although there are tobacco plants in the vicinity.

Respondents were selected using a two-stage sampling design. Within each of the two locations, a random sample of households was selected using a predetermined sampling interval. Within each of the selected households, one adolescent in the age group 12–22 was randomly selected for interviewing. The ESRAC-96 data set contains information on roughly 1,600 male and female adolescents aged 12–22, and it includes information on a wide range of indicators of sexual and reproductive behaviour and reproductive health outcomes, along with information about the respondent's socio-economic background.

To examine gender differentials in sexual activity and reproductive health risks we use the following indicators:

1. Sexual initiation

- a) a variable indicating whether or not an adolescent aged 15 years and older had sexual intercourse by age 15; and
- a variable indicating whether or not an adolescent aged 18 years and older was sexually experienced by age 18.

2. Multiple partnership

Experience with multiple partners is measured by three dummy variables indicating whether or not an adolescent:

- a) had two or more regular partners during the previous 12 months;
- b) had two or more casual partners during the previous year; and
- c) had two or more casual *or* regular partners during the previous year.

For each of these three indicators, respondents who had only one such partner were coded zero. Respondents who did not have any partners were also coded zero, as they did not experience any reproductive health risks.

3. Condom use

The respondents' condom use practices were measured by variables indicating whether or not a sexually experienced respondent:

- a) ever used a condom;
- b) used a condom during his/her last sexual intercourse;
- c) reports always using a condom when having sex with a regular partner (among those who had one or more regular partners during the last year); and
- d) reports always using a condom when having sex with a casual partner (among those who had one or more casual partners during the last year). These indicators are restricted to sexually experienced adolescents.

4. Reproductive health outcomes

Two indicators of reproductive health were used:

- a) a dummy variable indicating whether or not an adolescent woman who has ever been pregnant reports that she ever had an abortion; and
- a dummy variable indicating whether or not an adolescent who was sexually active during the past year had a sexually transmitted disease during that time.

The main explanatory variables are the respondent's age, school enrollment (student versus non-student), three dummy variables indicating with whom the respondent regularly discusses sexual issues or family planning (with parents, peers, or teachers), the respondent's opinion about whether it is all right for females to initiate condom use (yes/no), and the respondent's knowledge of a

source for obtaining condoms (yes/no). The respondent's age was included because reproductive health practices may change as one gets older, and because age correlates with the duration of exposure to reproductive health risks. School enrollment was also included as an explanatory variable because adolescents who are in school tend to have greater opportunities to interact with members of the opposite sex. Yet they may be concerned about pregnancy-related school dropouts,26 which may affect their behaviour. The indicators of discussion of sexual issues or family planning were included to assess the extent to which discussion with parents, peers and educators affects adolescent reproductive behaviour. Because access to condoms and one's ability to negotiate condom use are likely to affect condom use, the analysis of condom use also includes variables measuring whether the respondent knew where to obtain condoms and whether he or she felt that females can also initiate condom use.

Additional control variables include religion (Christian versus other), marital status (ever married versus never married) and location (Edéa versus Bafia). Because the data were collected in two different cities, the analyses had control for any differences in reproductive health behaviour that may exist between these two locations. Religion is an important control variable because religious affiliation tends to be associated with attitudes toward sexual behaviour, reproduction and contraceptive use. Marital status is included because it may affect reproductive health risks. In societies where marriage is early, marriage itself can expose very young adolescents to reproductive health risks. Yet at the same time marriage may reduce one's reproductive health risks, because married persons tend to have fewer sexual partners than unmarried persons.

Differentials by age and sex in the indicators of sexual and reproductive health behaviour are described using bar charts. Logistic regression analyses are used to examine the influence of the explanatory variables on these dependent variables. The models estimate the odds of an event occurring. (The odds that an event occurs equals the ratio of the probability that an event will occur, relative to the probability that it will not.) The results of the logistic regression models are expressed as odds ratios representing the effect of a one-unit change in the explanatory variables. Odds ratios

larger than one indicate a likelihood greater than that for the reference category; odds ratios smaller than one indicate a smaller likelihood compared with the reference category. All analyses were estimated separately for male and female respondents.

Results

Some of the main characteristics of the sample are shown in Table 1. The results show that the sample was roughly equally distributed between males and females, but the males in the sample were somewhat older than the females. Three out of every four adolescents in the sample were enrolled in school at the time of the study and more than eight out of every ten respondents were Christians. The results also confirm the high incidence of premarital sexual intercourse noted in the literature. Although only eight per cent of all females had married, 55 per cent were sexually experienced. Among males the pattern was similar — less than six per cent of males had married, although 70 per cent of adolescent males were sexually experienced. About two out of every three adolescents reported that they frequently discuss sexual issues or contraception with peers. Only four out of ten adolescents discussed such issues with teachers and very few with parents, particularly for males. Access to condoms appeared to be good. The majority of adolescents (62 per cent of females and 76 per cent of males) indicated that they could easily obtain a condom if they were to need one. Moreover, 69 per cent of males and 76 per cent indicates that it is fine for women to propose condom use, suggesting an open attitude toward condom use.

Sexual Initiation

This section describes differences in the timing of sexual initiation. Figure 1 shows the percentage of male and female adolescents aged 15/18 years and above, who were sexually experienced by age 15/18. The results show that for adolescents currently aged 15–17 years, only 27 per cent of females were sexually experienced by the time they reached age 15, as opposed to 48 per cent for males. For those now aged 18–22 years, sexual initiation was somewhat later, with 18 per cent of females and 42 per cent of males being sexually experienced by age 15. Examination of the percent-

age of adolescents who were sexually experienced by age 18 indicates that over 80 per cent of both males and females are sexually experienced by this age. The finding that sexual initiation typically occurs at an early age implies that HIV/AIDS prevention and other reproductive health programmes need to target adolescents when they are very young, particularly for males.

Table 1 Characteristics of 1600^a Adolescents Aged 12-22, Edea and Bafia, Cameroon

| | Females | Males | |
|-----------------------------------|--------------|-------|--|
| Aged 12–17 (%) | 59.3 | 46.0 | |
| Student (%) | 75.8 | 74.6 | |
| Christian (%) | 90.4 | 83.4 | |
| Ever married (%) | 8.0 | 5.6 | |
| Sexually experienced (%) | 54.6 | 69.8 | |
| Those who often discuss sexual | | | |
| issues or contraception (%) with: | | | |
| peers | 65. 0 | 71.3 | |
| parents | 26.5 | 14.3 | |
| teachers | 39.3 | 36.8 | |
| Those who could easily obtain | 62.3 | 75.8 | |
| a condom if they needed one today | 7 (%) | | |
| Those who believe it is fine for | 69.0 | 75.8 | |
| females to propose condom use (% |) | | |
| No. of cases | 798 | 802 | |

*Excludes five respondents who did not state their age.

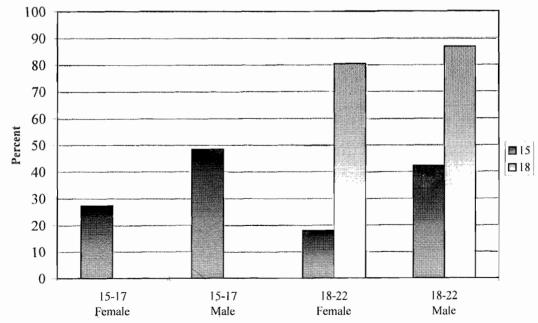


Figure 1 Percentage of adolescents who were sexually experienced by age 15 and 18

Table 2 Relative Odds of Becoming Sexually Active by Age 15 and Age 18 among Adolescents in Cameroon

| | Females | | Males | |
|----------------------------|------------|-------------|------------|-------------|
| | Odds ratio | Significant | Odds ratio | Significant |
| Sex by age 15 ^c | | | | |
| Age | 0.836 | b | 0.928 | |
| Christian | 0.541 | | 0.753 | |
| (Other = 1.000) | | | | |
| Student | 0.382 | b | 0.683 | а |
| Non-student = 1.000) | | | | |
| Ever married | 0.621 | | 1.035 | |
| Never married = 1.000) | | | | |
| Edéa | 0.885 | | 1.395 | |
| (Bafia = 1.000) | | | | |
| Discuss sex with parents | 0.740 | | 0.973 | |
| $N_0 = 1.000$ | | | | |
| Discuss sex with peers | 2.053 | Ь | 0.973 | |
| $N_0 = 1.000$ | | | | |
| Discuss sex with teacher | 0.803 | | 1.173 | |
| $N_0 = 1.000$ | | | | |
| No. of cases | 605 | | 627 | |
| Sex by age 18 ^d | | | | |
| Age | 0.807 | a | 1.047 | |
| Christian | 0.846 | | 1.052 | |
| (Other = 1.000) | | | | |
| Student · | 0.418 | а | 0.686 | |
| Non-student = 1.000) | | | | |
| Ever married | 3.583 | a | 0.704 | |
| Never married = 1.000) | | | | |
| Edéa | 0.751 | | 1.935 | а |
| Bafia = 1.000) | | | | |
| Discuss sex with parents | 0.854 | | 0.540 | |
| No = 1.000) | | | | |
| Discuss sex with peers | 2.463 | a | 2.540 | Ь |
| No = 1.000 | | | | |
| Discuss sex with teacher | 0.877 | | 1.541 | |
| No = 1.000) | | | | |
| No. of cases | 314 | | 415 | |

*p<0.05 bp<0.01 cRestricted to youths aged 15-22 dRestricted to youths aged 18-22

Table 2 shows the results of the logistic regression models estimating the effect of various independent variables on the likelihood that a respondent became sexually active by age 15 and by age 18. The findings presented in the first panel of Ta-

ble 2 show that younger female adolescents are more likely, than older females, to have become sexually active by age 15, indicating a trend towards earlier sexual initiation among females. For males this trend is not significant. A second important

finding is that adolescents who are currently enrolled in school are less likely to have become sexually active by the time they reached age 15. This effect is particularly strong for females. The latter was anticipated since schoolgids who become pregnant often drop out of school, as do girls who get married. However, the fact that this effect is also significant for males who marry much later and who need not drop out of school if they impregnate a girl suggests that students do indeed become sexually active at a comparatively late age. The results also show that females (but not males) who report often discussing sexual issues with peers and friends are more than twice as likely as other females to have become sexually active by age 15. While it is possible that discussions about sexual issues start after a woman has become sexually active, it seems more likely that peer pressure increases the likelihood that women become sexually active.

The second panel of Table 2 shows the factors affecting the likelihood of male and female adolescents becoming sexually active by age 18. Since the bivariate analysis had shown that the large majority of adolescents are sexually active by age 18, it is expected that the effect of the above-noted variables may have diminished. The results confirm the trend towards earlier sexual initiation among females. Being in school significantly lowers the odds that a female becomes sexually experienced by age 18, but it is not significant for males. Females who have married are also more likely than those who have not married to have become sexually active by age 18, a finding which partially reflects the relatively young female age at marriage. Finally, among both male and female adolescents aged 18 years and older, those who regularly discuss sexual issues with peers and friends are two and half times as likely as others to have become sexually active by age 18. The latter finding suggests that there was considerable peer pressure to become sexually active among the group of older adolescents (now aged 18-22).

Unsafe Sexual Practices

The ethnographic literature noted that sexual relationships often involve the exchange of gifts or money, and that in some cases this transactional component becomes so important that these relationships become a form of semi-prostitu-

tion. 15,24,35 The ESRAC-96 questionnaire asked male adolescents and young adults if they ever paid money or gifts in exchange for sex and asked females if they ever received money or gifts in exchange for sex. The results are presented in Figure 2. Among the youngest adolescents (aged 12-17) five per cent of females and 14 per cent of males reported having had sexual relations involving such exchange. For the older adolescents, this is the case for 15 per cent of females and 30 per cent of males. These findings confirm the reports in literature, indicating that relationships that approach semi-prostitution are not uncommon among adolescents and young adults. This transactional aspect of sexual relationships may help to encourage adolescents and young adults to have sexual relationships with multiple partners.

Adolescents and young adults who have multiple partners are expected to have a higher risk of contracting HIV/AIDS. Figure 3 shows the percentage of female and male adolescents and young adults who reported having two or more partners during the twelve months before the survey. Among those adolescents aged 12-17 years, five per cent of females and 16 per cent of males reported having two or more regular partners in the last year. These percentages increase considerably with age, and roughly one out of every six women (16%) and nearly one out of every two men (44%) had two or more regular partners during the previous year. The respondents' experience with multiple casual partners is shown there as well. The percentage of adolescents and young adults who had two or more casual partners during the last year is a little bit lower than for regular partners, but it follows a similar pattern. As before, males are more likely than females to have had multiple casual partners, and for males and females the likelihood of having had multiple casual partners increases with age. Among those aged 18-22, one out of every eight females (12%) and more than one out of every three males (36%) reported having multiple casual partners in the last year.

The results indicate that among adolescents aged 12-17 years, one in ten females (10%) and more than one in five males (22%) had two or more regular or casual partners during the previous twelve months. For the older adolescents, aged 18-22 years at the time of the survey, one out of three females (37%) and nearly two out of three males (63%) admitted to having multiple partners during the previous year. These results not only confirm findings from ethnographic studies indicating that having multiple partners is common but also show that this practice starts at a relatively young age, and that it also occurs among females, albeit not to the same extent as among adolescent men.

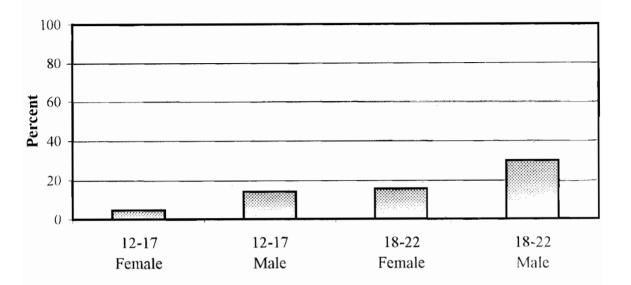


Figure 2 Percentage of male adolescents who ever paid money for sex and percentage of female adolescents who ever received money for sex

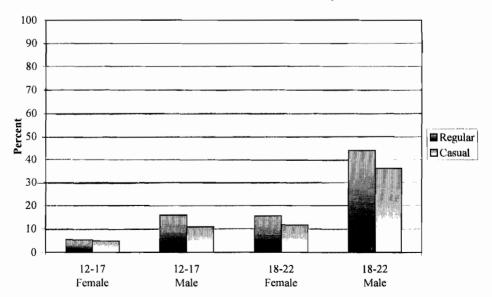


Figure 3 Percentage of adolescents who had two or more regular or casual partners during the past year

Table 3 Relative Odds of Having Two or More Regular Partners and Two or More Casual Partners among Adolescents in Cameroon

| | Females | | Males | |
|--------------------------|------------|-------------|------------|-------------|
| | Odds ratio | Significant | Odds ratio | Significant |
| 2 + Regular partners | | | | |
| Age | 1.220 | Ь | 1.295 | Ь |
| Christian | 0.631 | | 1.360 | |
| (Other = 1.000) | | | | |
| Student | 0.611 | | 0.873 | |
| (Non-student = 1.000) | | | | |
| Ever married | 0.710 | | 0.771 | |
| (Never married = 1.000) | | | | |
| Edéa | 0.983 | | 0.972 | |
| (Bafia = 1.000) | | | | |
| Discuss sex with parents | 1.713 | | 0.650 | |
| (No = 1.000) | | | | |
| Discuss sex with peers | 1.544 | | 1.627 | а |
| (No = 1.000) | | | | |
| Discuss sex with teacher | 0.873 | | 1.597 | a |
| $(N_0 = 1.000)$ | | | | |
| No. of cases | 789 | | 789 | |
| 2 + Casual partners | | | | |
| Age | 1.168 | Ь | 1.341 | ь |
| Christian | 1.751 | | 0.818 | |
| (Other = 1.000) | | | | |
| Student | 0.539 | | 0.459 | Ь |
| (Non-student = 1.000) | | | | |
| Ever married | 0.374 | | 0.382 | а |
| (Never married = 1.000) | | | | |
| Edéa | 1.640 | | 1.210 | |
| Bafia = 1.000 | | | | |
| Discuss sex with parents | 0.998 | | 0.503 | a |
| $N_0 = 1.000$ | | | | |
| Discuss sex with peers | 2.103 | а | 1.983 | ь |
| (No = 1.000) | | | 230 | |
| Discuss sex with teacher | 1.092 | | 0.930 | |
| $(N_0 = 1.000)$ | | | ****** | |
| No. of cases | 777 | | 727 | |

^ap<0.05 ^bp<0.01

Table 3 shows the results of multivariate logistic regression analyses of the effect of independent variables on the likelihood of having had two or more regular partners (first panel) or two or more casual partners (second panel) during the

year before the survey. The results indicate that the likelihood of having had two or more regular partners significantly increases with age for both males and females. Among males, those who reported regularly discussing sexual issues with peers and

friends, or with teachers, are more likely than others to have had multiple regular partners during the previous year. The results for casual partners, shown in the second panel of Table 3, are more revealing. Among both males and females the likelihood of having had multiple casual partners increases significantly with age, and those who regularly discuss sexual matters with friends and peers are twice as likely as others to have had multiple casual partners. As expected, those adolescents who have been married are less likely than others to have multiple casual partners but the effect is significant only for males. Among males, the likelihood of having multiple casual partners is significantly lower for students than for non-students. This finding can be explained by the fact that men are expected to provide girls they date with gifts and/or money. Since young men who are still in school are less likely to have money than those who are working, the former are less likely to have multiple casual partners. Finally, males who indicate regularly discussing sexual issues with their parents are only half as likely as other males to have had multiple casual partners during the previous year. This latter finding suggests that parents may be an effective source of family life education.

Condom Use among Adolescents

The percentage of sexually experienced adolescents and young adults who ever used a condom is shown in Figure 4. The results show that a large percentage of sexually experienced adolescents have used the condoms and that this percentage increases with age. Among those aged 12-17 years, 39 per cent of females and 43 per cent of males have used condom at least once. Among those aged 18-22 years, these percentages increased to 62 and 71 per cent respectively. Considering that women may under-report use of male methods, this gender differential in ever-use of condoms is very small.

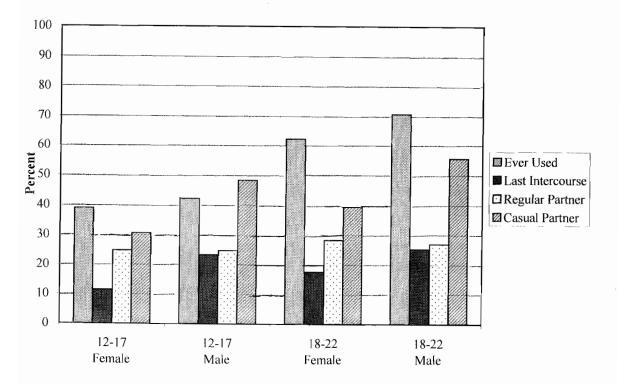


Figure 4 Percentage of condom use among sexually experienced adolescents

| | Females | | Males | |
|----------------------------|------------|-------------|------------|-------------|
| | Odds ratio | Significant | Odds ratio | Significant |
| Age | 1.228 | ь | 1.231 | ь |
| Christian | 0.707 | | 1.314 | |
| (Other = 1.000) | | | | |
| Student | 1.470 | | 1.056 | |
| (Non-student = 1.000) | | | | |
| Ever married | 0.582 | | 1.196 | |
| (Never married = 1.000) | | | | |
| Èdéa | 1.15 | | 0.890 | |
| (Bafia = 1.000) | | | | |
| Two + regular partners | 1.730 | ь | 0.981 | |
| (Less than two = 1.000) | | | | |
| Two + casual partners | 0.939 | | 1.032 | |
| (Less than two = 1.000) | | | | |
| Female can initiate | 2.577 | b | 2.586 | Ь |
| condom use | | | | |
| (Cannot = 1.000) | | , | | |
| Knows condom source | 3.541 | b | 1.102 | |
| (Does not = 1.000) | | | | |
| Discuss sex with parents | 1.157 | | 1.026 | |
| (No = 1.000) | | | | |
| Discuss sex with peers | 1.648 | | 1.344 | |
| (No = 1.000) | | | | |
| Discuss sex with teacher | 1.138 | | 1.883 | а |
| (No = 1.000) | | | | |
| No. of cases | 379 | | | 435 |

^ap<0.05 bp<0.01

Factors affecting the likelihood that male and female adolescents and young adults have ever used a condom are shown in Table 4. The results confirm findings from the bivariate analysis indicating that the likelihood that an adolescent has ever used a condom significantly increases with age, for both females and males. Among females, women who had multiple regular partners during the previous year are significantly more likely than those who did not have multiple regular partners to have used condoms. Surprisingly, condom use does not differ between women who had multiple casual sexual partners and those who did not have multiple casual partners. One possible explanation for this finding is that females predominantly use condoms not for the prevention of sexually transmitted diseases but for pregnancy prevention. In

such a case, women would typically only want to have children with one regular partner and avoid being pregnant by all other regular and irregular partners. Among males, neither having multiple regular partners nor having multiple casual partners significantly affects condom use. The results presented in Table 4 also show that respondents who think that it is all right for females to initiate condom use are two and a half times more likely than others to have used condoms. These patterns hold for both males and females. This finding indicates that it is important for HIV/AIDS intervention programmes to employ information, education and communication (IEC) campaigns to increase acceptability of condom use. Among females, but not males, knowledge of a place to obtain condoms is associated with a much higher

likelihood of having used condoms. Finally, males who often discuss sexual matters with their teachers are significantly more likely than those who do not discuss such issues with their teachers to have used condoms, suggesting that teachers may provide males, but not females, with important information.

Despite the promising findings for ever-use of condoms, condom use at last sexual intercourse is quite low. Figure 4 shows that only 18 per cent of females aged 18-22 years and about 25 per cent of males in that age group used a condom at last intercourse. The finding that condom use at last intercourse is much lower than ever-use may indicate that condom users have high discontinuation rates, that condom use is very irregular, or that condoms are used only with some partners and not with others. To investigate if condom use varies by the type of partner, we again refer to Figure 4, which shows the percentage of respondents who reported always using a condom with their regular partners (among those who had one or more regular partners during the last year) and the percentage of respondents who reported that they always use condoms with casual partners (among those who had one or more causal partners during the previous year). Our data indicates that roughly one out of four respondents always use a condom with their regular partner. There are no noteworthy differences in condom use with regular partners by either gender or age. However, regular condom use is much more common with casual partners than with regular partners. Thirty-one per cent of young adolescent females and 48 per cent of males reported that they always use condoms with casual partners. This percentage increases with age, and for the age group 18-22, 40 per cent of females and 56 per cent of males reported always using a condom with a casual partner.b*

Adolescent Reproductive Health Problems

The patterns of adolescent sexual behaviour and condom use discussed earlier affect the likelihood of having an unwanted pregnancy and of contract-

ing sexually transmitted diseases. Among those females who have been pregnant, the percentage of adolescent women now aged 15-17 who admit having had an abortion is one in eleven (9%). For older adolescents now aged 18-22, this is the case for one out of every five women (20%). For both age groups combined, 17.4 per cent reported having had an abortion, which is consistent with findings from other studies indicating that 18 per cent of adolescent pregnancies in Cameroon result in induced abortion.22

Previous research has also indicated that the incidence of sexually transmitted diseases is high among sexually experienced adolescents in Cameroon, particularly among the males.23 Figure 5 shows the percentage of adolescents who reported having a sexually transmitted disease during the previous year (among those adolescents who had at least one sexual partner during the previous year). Among the youngest age group (ages 15-17) nearly one out of every 15 sexually active adolescents (7%) reported having a sexually transmitted disease during the previous year. For this age group there is no noticeable gender difference in the occurrence of STDs, but among older adolescents there is evidence that males are much more likely than females to have contracted a sexually transmitted disease. Figure 5 shows that among sexually active adolescents aged 18-22, one out of every ten females (10%) and one out of every five males (20%) had a sexually transmitted disease during the twelve months before the survey.

Table 5 shows the factors affecting the likelihood of having contracted a sexually transmitted disease during the previous year. As anticipated, having multiple partners is an important risk factor. Among females, those who had multiple regular partners during the year before the survey are 3.8 times as likely as those who did not have multiple regular partners to have contracted an STD. Similarly, females who had multiple casual partners are 3.5 times as likely as those who did not to have had a sexually transmitted disease. Among males, having multiple regular partners is also an important

b It is noted, however, that the percentage of adolescents reporting condom use during their last sexual act is lower than their alleged condom use with either regular or irregular partners, suggesting that these data on condom use by partner type may reflect normative behaviour (influenced by AIDS prevention campaigns) and should be used with caution.

risk factor for sexually transmitted diseases, but having multiple causal partners is not. This finding is consistent with the earlier finding that males are more likely to regularly use condoms with casual partners than with regular partners. As yet, the risk of having had an STD does not vary between those re-

spondents who ever used condoms and those who did not, once again confirming that condom use remains too irregular to have an overall impact on adolescent reproductive health, and that there is an important need for HIV/AIDS prevention campaigns that target adolescents and young adults.

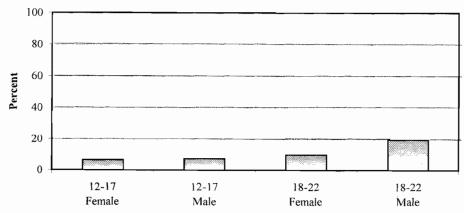


Figure 5 Percentage of sexually experienced adolescents who reported having had STD during the past year

Table 5 Relative Odds of having had STD during the Last Twelve Months among Adolescents in Cameroon

| | Females | | Males | |
|----------------------------|------------|-------------|------------|-------------|
| | Odds ratio | Significant | Odds ratio | Significant |
| Age | 1.139 | | 1.099 | |
| Christian | 0.848 | | 0.927 | |
| (Other = 1.000) | | | | |
| Student | 0.564 | | 0.620 | |
| (Non-student = 1.000) | | | | |
| Ever married | 0.497 | | 0.959 | |
| (Never married = 1.000) | | | | |
| Edéa | 1.215 | | 0.423 | ь |
| (Bafia = 1.000) | | | | |
| Two + regular partners | 3.756 | b | 2.608 | Ь |
| (Less than two = 1.000) | | | | |
| Iwo + casual partners | 3.504 | Ь | 0.947 | |
| (Less than two = 1.000) | | | | |
| Ever used condom | 1.223 | | 1.130 | |
| (Never used $= 1.000$) | | | | |
| No. of cases | 384 | | | 431 |

Discussion

This study has described gender differentials in adolescent sexual and reproductive behaviour in urban Cameroon, and has examined the extent to which male and female adolescent sexual and reproductive behaviour is affected by the same factors. Several important findings emerged from this study. The results of the analysis of the timing of sexual initiation show that males tend to become sexually active at an earlier age than females. Nevertheless, by the time they reach age 18 the majority of adolescents, males and females alike, are sexually experienced. The multivariate analyses further show a trend among females toward earlier initiation of sexual activity. This finding is consistent with arguments suggesting that the current economic crises encourages girls to become sexually active at an early age for economic reasons. 1,2 As expected, peer influences encourage early sexual initiation among both males and females, especially among the group of older adolescents (now aged 18-22). Concerns about the impact of peer pressure are sometimes interpreted as an indication that being enrolled in school causes early sexual initiation. However, the data show that the net effect of being enrolled in school is to postpone, rather than encourage, sexual initiation.

A significant proportion of adolescents have had a transaction of money and/or gifts in exchange for sex, suggesting that some adolescents engage in relationships that resemble a form of semi-prostitution. Most likely, such explicit transactions in exchange for sex are motivated in part by the harsh economic conditions. It is also very common for adolescents to have multiple sexual partners, especially (but not solely) among older adolescents. Among adolescents and young adults aged 18 years and older, one out of every six women and one out of every two men had two or more regular partners during the previous year. Furthermore, one in eight females and one in three males in this age group reported having two or more casual partners during that period. The data clearly show that even though both males and females tend to be sexually active by the time they reach age 18, older adolescent males are more likely than females to engage in risky sexual practices.

Ever-use of condoms is very high among Cameroonian adolescents, for both females (62%)

and males (71%). Among both sexes, condom use significantly increases with age, and is higher for those adolescents who believe that women should be able to initiate condom use. This finding implies that HIV/AIDS prevention programmes should use IEC campaigns to increase the acceptability of condom use among adolescents. Although ever-use of condoms is very high, current use has remained low, indicating that condom use is irregular, or that condoms are only used with some partners and not with others. Comparison of reported condom use with regular and casual partners shows that women have similar condom usage patterns for both types of partners, while men are much more likely to use condoms with casual than with regular partners. Such a pattern suggests that men are using condoms to avoid contracting sexually transmitted diseases while women are using them to prevent pregnancy.

As anticipated, these high rates of adolescent sexual activity, combined with low and inconsistent use of the condom, lead to fairly high levels of induced abortion and to a high prevalence of sexually transmitted diseases. In the study population, males aged 18–22 years have the highest incidence of sexually transmitted diseases but it is evident that female adolescents also face considerable sexual and reproductive health risks, even at a very young age. The results from this study highlight the need for additional and better programmes specifically designed to address the sexual and reproductive health risks of Cameroonian adolescents.

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REFERENCES

- Abéga SC, Tamba LM, Balla C, Anaba Metomo FN, Angah M et Nama N. Apprentissage et Vécu de la Sexualité chez les Jeunes Camerounais de 15 à 30 ans.Rapport de mi-parcours (Octobre). Geneva: Organisation Mondiale de la Santé (WHO) and Yaoundé: Université de Yaoundé I, 1994.
- Abéga SC, Tamba LM, Balla C, Anaba Metomo FN, Angah M et Nama N. Apprentissage et Vécu de la Sexualité chez les Jeunes Camerounais de 15 à 30 ans. Deuxième Rapport (Mai-Juin). Geneva: Organisation Mondiale de la Santé (WHO) and Yaoundé: Université de Yaoundé I, 1994.
- Akuffo FO. Teenage pregnancies and school dropouts: the relevance of family life education and vocational training to girls' employment opportunities. In: Oppong C, (ed.) Population and Development in West Africa. Portsmouth: Heinemann, 1987:154-64.
- Alexandre P et Binet J. Le groupe dit Pahouin (Fang, Boulou, Beti). Paris: Presses Universitaires de France, pour l Institut International Africain, 1958.
- Archibong EI. Illegal induced abortion: a continuing problem in Nigeria. Int J Gynaecol Obstet 1991; 34(3): 261-5.
- Brokenshire C. Family planning policy impact on abortion practices in Kenya. Paper presented at the annual meeting of the American Public Health Association, Chicago, Illinois, 22–26 October 1989.
- Brokensha D. Overview: social factors in the transmission and control of African AIDS. In: Miller N and Rockwell RC (Eds.) AIDS in Africa: The Social and Policy Impact. Lewistown/Queenston: Edwin Mellen, 1988:167-73.
- Calvès AE. Youth and fertility in Cameroon: changing patterns of family formation. Unpublished Ph.D. Thesis. University Park, PA: The Pennsylvania State University, 1996.
- Calvès AE and Meekers D. Re-evaluating the value of children in Africa: changing forms of marital unions and childbearing motivations. Forthcoming in J Comp Fam Stud.
- 10. Calvès AE. Cornwell GT and Eloundou Enyegue PM. Adolescent sexual activity in sub-Saharan Africa: do men have the same strategies and motivations as women? Population Research Institute Working Papers in African Demography AD94-04. University Park: The Pennsylvania State University, 1996.
- Coeytaux FM. Induced abortion in sub-Saharan Africa: what we do and do not know. Stud Fum Plann 1988; 19(3): 186-90.
- David N and Voas D. Social causes of infertility and population decline among the settled Fulani of north Cameroon. Man 1981; 16(4): 644–64.

- Dinan C. Sugar daddies and gold-diggers: the whitecollar single women in Accra. In: Oppong C, (Ed.). Female and male in West Africa. London: George Allen and Unwin, 1993:344–66.
- Dynowski-Smith M. Profile of youth in Botswana. Gaborone, Botswana: Intersectoral Committee on Family Life Education, Government Printer, 1989.
- Franqueville A. Yaoundé: Construire une capitale. Memoire ORSTOM No. 104. Paris; ORSTOM 1984.
- 16. Gage A and Bledsoe C. The effects of education and social stratification on marriage and the transition to parenthood in Freetown, Sierra Leone. In: Bledsoe C, Pison G, (Eds.) Nuptiality in sub-Saharan Africa. Contemporary Anthropological and Demographic Perspectives. Oxford: Clarendon Press, 1994:148-66.
- Gyepi-Garbrah B. Adokscent fertility in sub-Saharan Africa: an overview Boston and Nairobi: The Pathfunder Fund, 1985.
- Karanja WW. The phenomenon of "outside wives". Some reflections on its possible influence on fertility. In: Bledsoe C, Pison G, (Eds.). Nuptiality in sub-Saharan Africa. Contemporary Anthropological and Demographic Perspectives. Oxford: Clarendon Press, 1994:194–214.
- Koussidji S and Mueller E. The economic and demographic status of female-headed households in rural Botswana. Econ Dev Cult Change 1983; 31:831-59.
- Laburthe-Tolra P. Les Seigneurs de la Forêt. Paris: Publications de la Sorbonne, 1981.
- Leke RJ. Commentary on unwanted pregnancy and abortion complications in Cameroon. Int J Gynaecal Obstet 1989; 3(l): 33-55.
- Leke RJ. Adolescent reproductive health status and strategies for its improvement in Cameroon. Paper presented at the International Forum on Adolescent Fertility, Washington DC, 1990.
- Mafany NM, Mati JK and Nasah BT. Knowledge of and attitudes towards sexually transmitted diseases among secondary school students in Fako District, Cameroon. East Afr Med J 1990; 67(10): 706–11.
- Mainet G. Le role de la femme dans l'économie urbaine à Douala. In: Barbier JC, ed. Femmes du Cameroun. Mères pacifiques, femmes rebelles. Paris: ORSTOM/Karthala, 1985:369–83.
- Meekers D. Sexual initiation and premarital childbearing in sub-Saharan Africa. Popul Stud 1994; 48:47–64.
- Meekers D and Ahmed G. Pregnancy-related school dropouts in Botswana. Population Studies, 1999; 5(2):117-128.
- National Research Council. Social dynamics of adolescent fertility in sub-Saharan Africa. Washington DC: National Academy Press, 1993.
- Ngoa H. Le mariage chez les Ewondo. Thèse de doctorat de troisième cycle en sociologie. Paris: Université de Paris-Sorbonne, 1968.

- Ocholla-Ayayo AB, Wekesa JM and Ottieno JA. Adolescent pregnancy and its implications among ethnic groups in Kenya. Paper presented at the International Population. Conference, Montreal, 24 August 1 September 1993.
- Odujirin OM. Sexual activity, contraceptive practice and abortion among adolescents in Lagos, Nigeria. Int J Gynaecol Obstet 1991; 34(4): 361-66.
- Orubuloye IO, Caldwell J and Caldwell P. Sexual networking in the Ekiti District of Nigeria. In: Orubuloye IO, Caldwell J, Caldwell P, Santow G, (Eds.). Sexual behavior and AIDS in sub-Saharan Africa. Behavioral change and the social context. Camberra: Health Transition Centre, Australian National University, 1994:12-32.
- Pazie AJ. State of unsafe abortion in Burkina Faso. Paper presented at the Conference on Unsafe Abortion and Post Abortion Family Planning in Africa, held in Mauritius, 24–28 March 1994.
- Reid E and Bailey M. Young women: silence, susceptibility and the HIV epidemic. United Nations Development Programme, Issues Paper 12. New York: United Nations, 1993.

- Rogo KO. Induced abortion in sub-Saharan Africa. East Afr Med J 1993; 70(6): 386–95.
- Songué P. La prostitution en Afrique. L'example de Yaoundé. Paris: Editions l'Harmattan, 1986.
- Standing H and Kisekka M. Sexual behavior in sub-Saharan Africa. A review and Annotated Bibliography. London: Overseas Development Administration, 1989.
- 37. Tchupo JP, Keupie M, Dipoko D, Abbo M, Barnes J, Timyan J and Meekers D. Project de recherche operationelle sur la Santé réproductive des adolescents au Cameroun. Données quantitatives de base a Edéa et Bafia, 1996. Yaoundé: Population Services International and IRESCO, 1996.
- United Nations. The world's women 1995. Trends and statistics. New York: United Nations, 1995.
- 39. Yana SD. A la recherche des modèles culturels de la fécondité au Cameroun: une étude exploratoire auprès de Bamiléké et Béti de la ville et de la campagne. Paris: l'Harmattan, 1995.
- Frank O. Infertility in sub-Saharan Africa: estimates and implications. *Population and Development Review* 1983; 9(1): 137-44.