Sexual Risk Behaviors Among Young People In Bamenda, Cameroon

By Mburano Rwenge

Context: Increases in levels of awareness of HIV and greater knowledge about its transmission and prevention have not always been associated with decreases in risky sexual behaviors among young people in Cameroon. More information is needed about the factors associated with these behaviors.

Methods: Data on social, demographic and economic characteristics and sexual behavior were collected from 671 youths living in Bamenda, Cameroon, in 1995. Multivariate techniques were used to analyze the effects of these characteristics on early initiation of intercourse, sex with multiple partners, casual sex and nonuse of condoms.

Results: The average age at first intercourse was 15.6 for males and 15.8 for females. The main reason given for initiating sexual activity was curiosity (53% of males and 42% of females). Some 37% of females and 30% of males, however, said their first sexual experience had not been voluntary. The most important factors in initiation of sex before age 16 were father's ethnicity, attending school and having a primary or middle-school education. Family composition and household standard of living were the factors most consistently associated with sexual risk behaviors. Compared with youths living in a household with a high standard of living, those living in a poor household were 1.4 times as likely to be sexually active at the time of the survey and 1.3 times as likely to have had casual sex in the previous year. Young people living with only one parent were 1.6 times as likely as those in two-parent households to be sexually active, 2.8 times as likely to have multiple concurrent partners, 1.7 times as likely to have had casual sex in the previous year and 1.1 times as likely not to be using condoms. Living with grandparents generally had a protective effect, while living with a sibling, alone or with other persons generally increased the likelihood of engaging in sexual risk behaviors.

Conclusions: Youths with few economic resources and those with less stable living environments are more likely than other youths to engage in sexual behaviors that put them at risk of contracting HIV. Improving the living conditions of families, especially those headed by single women, could help curb the spread of AIDS.

International Family Planning Perspectives, 2000, 26(3):118-123 & 130

Texuality is an area that has long attracted sociologists and anthropologists as well as demographers because of the identified relationships between sexual behaviors and certain reproductive health problems. In Sub-Saharan Africa, the first studies on sexual behavior were conducted to determine the causes of widespread infertility and sterility, especially in Central Africa. Most concluded that these problems resulted from decreased control of elders over young people, economic hardship and the presence of societies with permissive sexual customs.1 These factors were considered to have contributed to the spread of sexually transmitted diseases (STDs) that cause infertility (gonorrhea, chlamydia and mycoplasma) or disrupt pregnancy (syphilis). After the beginning of the AIDS epidemic in the early 1980s, some STDs were found to increase the probability of sexual transmission of HIV.2

Because the majority of African women

do not use modern contraceptive methods, those who are sexually active are at high risk of conception. Thus, in this region of the world, there is a high risk of maternal and infant mortality because of early pregnancy, induced abortion (which, in the many countries where it is illegal, is often carried out in unsafe circumstances), short interpregnancy intervals, and high and prolonged fertility.³

Despite these risks, little research has been done in Sub-Saharan Africa to determine the factors affecting sexual behavior, especially in young people. The few studies that have been done have been essentially quantitative and descriptive.

Among health problems related to sexuality, AIDS is currently the main concern of the public authorities in Africa; its prevalence continues to increase in most of the countries in the region, with disastrous psychosocial, demographic and socioeconomic repercussions.

In Cameroon, as everywhere else in

Africa, sensitization and information programs on AIDS have been implemented along with efforts to promote the use of condoms. However, these programs have had limited results. In fact, in certain social strata, an appreciable increase in the level of awareness about AIDS and prevention methods has not translated into adoption of healthy sexual behaviors.⁴

The prevalence of AIDS and its rate of increase are higher in Northwest Province than in the other provinces of Cameroon.⁵ Bamenda, the capital of the province, had a population estimated at about 111,000 in the 1987 census; a large proportion of its inhabitants are younger than 25. The city is home to several ethnic groups. Some, like the Makon-Banyague, have permissive sexual customs. Others, including the Metta, the Bali-Ngemba, the Tikari-Nsoh and the Bamiléké, impose strict control of sexual activity.

This article examines socioeconomic and demographic characteristics in a sample of 671 young people in Bamenda to identify the factors associated with risky sexual activity. It focuses on young people because they engage in more frequent sex and have a long period of sexual activity before them; thus, the future prevalence of AIDS depends heavily on the direction that prevention programs take with respect to young people.

Methodology

Definition of Concepts

For the purposes of this study, adolescence is considered to encompass approximately ages 12–25, a period of transition between childhood and adulthood during which the individual assumes his position as an active member of society. It is divided into four overlapping stages: sexual awakening (12–15), first sexual intercourse (14–17), gender role definition (16–19) and social role definition (18–25).

Mburano Rwenge is an educator and researcher at the Institute for Demographic Education and Research, Yaoundé, Cameroon. The research on which this article is based received financial support from the Small Grants Programme of the Union for African Population Studies. The author is grateful to Ibrahima L. Diop, coordinator of the program, and to Ngondo A. Pitshandenge, who supervised this research.

Table 1. Percentage distribution of young people in Bamenda, Cameroon, by selected characteristics, according to gender, Survey on the Sexual Behavior of the Young People of Bamenda, 1995

Characteristic	AII (N=646)	Male (N=378)	Female (N=268)
Age			
12-14	20.3	16.4	25.8
15–18	33.2	30.5	37.1
≥19	46.5	53.1	37.1
Currently in school			
Yes	69.0	63.1	77.2
No	31.0	36.9	22.8
Employment†			
Not working	24.1	13.9	48.3
Agriculture/fishing/			
livestock breeding	2.6	3.0	1.7
Commerce	22.5	29.1	6.9
Manager/office worker	10.3	11.7	6.9
Skilled worker	23.1	22.6	24.1
Specialized worker	17.4	19.7	12.1
	.,	10.7	12.1
Educational level			
None	4.8	4.8	4.9
Primary Middle school	30.6 42.9	32.5 37.3	27.5 50.9
High school	16.3	37.3 17.3	15.1
Higher education	5.3	8.1	1.6
riigiioi oddoddioii	0.0	0.1	1.0
Religion	40.5	40.0	00.7
Catholic	43.5	46.3	39.7
Protestant Muslim	43.5 4.6	41.4 4.9	46.2 4.2
Traditional	4.4	3.8	5.3
Other	4.0	3.5	4.6
Father's job	E 0	5.5	4.6
Not working Agriculture/fishing/	5.0	5.5	4.6
livestock breeding	18.9	18.1	19.9
Commerce	17.5	18.7	15.7
Manager/office			
worker	37.3	36.0	39.1
Skilled worker	8.8	8.5	9.2
Specialized worker	8.9	9.1	8.8
Other	3.6	4.1	2.7
Total	100.0	100.0	100.0

†Among nonstudents only (N=200).

The first two stages correspond to biological and physiological adolescence and the latter two to psychological and social adolescence. In this study, first sexual intercourse occurring during physiological adolescence (i.e., before age 16) is considered precocious.

The sexual risk behaviors that we examine are those that expose young people to a greater risk of infection by the AIDS virus. They include having multiple concurrent sex partners, having had sex with a casual partner and failing to use a condom during sexual intercourse.

Hypotheses

This study is based on the following hypotheses:

- Adolescents usually do not obtain information about sex from their parents or guardians.
- For the most part, they are informed about HIV, its main means of transmission and its methods of prevention.
- Large proportions have precocious sexual intercourse and engage in sexual behavior that may expose them to HIV infection.
- Sociocultural and socioeconomic factors influence their sexual behavior.

Data

To test these hypotheses, the study used data from the Survey on the Sexual Behavior of the Young People of Bamenda, which was conducted in August 1995. In the first phase of this two-phase cluster survey, five neighborhoods were randomly selected in proportion to the size of their populations. In the second phase, interviewers followed a preset itinerary from household to household until they reached the sample size of young people for a given neighborhood.

The survey collected information on the participants' social, economic and demographic characteristics, on the characteristics of the households in which they lived and on their family environment. It also asked questions about the young people's sex education by their parents or guardians, their awareness of AIDS, their knowledge about methods of preventing infection with HIV, their sources of information about AIDS, the measures they had taken to prevent the disease and their sexual behaviors.

Analysis

Simple cross-tabulation was used to determine the proportion of young people who had obtained information about sex and sexuality from their parents or guardians, the level of awareness about AIDS and the use of methods of AIDS prevention. Multivariate classification analysis was then used to examine the characteristics of young people who had had precocious first sexual intercourse, and logistic regression was used to look at the characteristics of those who had engaged in risky sexual behaviors.

Results

Sample Characteristics

Males were more heavily represented than females in the sample (59% vs. 41%). Nearly all (96%) of the young people were unmarried, so those who were married were excluded from further analysis, leaving 646 in the final sample. At the time of the sur-

vey, 31% of the unmarrried young people interviewed had had primary schooling, 43% had reached middle school, 16% had reached high school and 5% had continued their education beyond high school; only 5% had had no schooling (Table 1).

Sex Education

Overall, approximately three of five young people said they had discussed one or more sexual topics with their schoolmates or friends. On the other hand, fewer than two of five had discussed such issues in a family setting. Most of those who said that they had had such discussions with family members had had them either with their elders or with their mother. On average, the young people in our sample thought that the ideal age for starting sex education was 13.8 years for girls and 15.0 years for boys.

Awareness of AIDS

Overall, 97% of the young people had heard of AIDS (Table 2). About half had obtained information about AIDS from radio (54%) or television (50%), while smaller proportions had heard about the syndrome from friends or school (17% each), newspapers (14%) and health centers or family (9% each, not shown). The level of AIDS awareness varied very little by gender.

Sexual intercourse was identified by

Table 2. Percentage of young people giving specified responses to measures of knowledge of HIV and awareness of means of transmission and prevention, by gender

Measure	All	Males	Females	
Has heard of HIV/A	Has heard of HIV/AIDS			
Yes	97.1	96.8	97.4	
No	2.9	3.2	2.6	
Means of HIV trans	mission	known		
Sexual intercourse	93.5	93.2	93.9	
Mother-to-child	13.7	14.2	13.1	
Shared needles	38.5	41.0	34.8	
Infected blood	51.4	52.1	50.4	
High-risk groups k	nown			
Prostitutes	66.4	66.9	65.9	
People who are				
unfaithful	39.5	38.6	40.7	
Everyone	17.9	19.9	15.0	
Knows a means of	prevent	ion		
Yes	76.3	80.4	70.6	
No	23.7	19.6	29.4	
Means of prevention known				
Fidelity	15.0	10.1	17.6	
Abstinence	24.3	23.5	25.2	
Condom use	89.2	89.7	88.3	
Knows condoms are				
effective against H Yes	71.7	73.1	69.2	
No.	28.3	26.9	30.8	
INO	۷٥.٥	20.9	30.0	

Table 3. Percentage distribution of young people, by characteristics of first sexual experience, according to gender

Characteristic	All	Male	Female	
Age at first sex				
≤14	24.3	28.0	18.7	
15–17	55.2	46.9	67.6	
18–22	20.5	25.1	13.7	
Age of first partner				
Same age	31.2	40.1	17.5	
Younger	21.4	34.2	1.4	
Older	47.4	25.7	81.1	
First sex was volun	tarv			
Yes	67.2	70.1	62.7	
No	32.8	29.9	37.3	
Intends to continue relationship with first partner				
Yes	69.1	65.6	75.3	
No	30.9	34.4	24.7	
Intends to marry first partner				
Yes	25.6	19.6	36.4	
No	74.4	80.4	63.6	
Motivation for first sexual experience				
Forced to have sex	35.2	30.0	40.0	
Curiosity	48.5	53.0	41.5	
Urging of friends	13.2	11.5	18.5	
Other	3.1	5.5	0.0	
Total	100.0	100.0	100.0	

most of the young people (94%) as a way in which HIV is transmitted, followed by infected blood (51%), shared needles (39%) and maternal transmission (14%). Prostitutes (66%) and individuals who are unfaithful to their sexual partners (40%) were cited as the groups at greatest risk of contracting the virus. The most commonly mentioned methods of preventing AIDS were use of condoms (89%), abstinence (24%) and fidelity (15%). Again, there were few differences by gender in these responses.

The main measures that these young people had taken to prevent AIDS (not shown) were abstaining from sex (64%), being faithful to one partner (55%), using condoms with casual partners (19%) and limiting the number of partners (13%). Females were more likely than males to have adopted abstinence (71% vs. 60%) and fidelity (61% vs. 45%), while males were more likely to have adopted condom use (22% vs. 15%).

First Sexual Intercourse

For the most part, males and females had begun having sexual intercourse before they were 18 (Table 3). However, three males out of 10 (versus two females out of 10) had already had sex by age 14. Consequently, the mean age at first sexual intercourse was slightly lower for males than for females (15.6 vs. 15.8). On aver-

age, the young people surveyed thought that the ideal age to begin having sexual intercourse was 18—approximately two and one-half years later than their actual mean age at first sexual activity.

Most females (81%) had first had sex with someone older than themselves, while most males had done so with someone of the same age (40%) or younger than themselves (34%). Some 37% of females and 30% of males said their first sexual experience had not been voluntary. Force aside, the main reason cited for initiating sexual intercourse was curiosity (53% of males and 42% of females), followed by the influence of friends (12% and 19%, respectively).

A multiple classification analysis (results not shown) indicates that in this group of young people, having had intercourse before age 16 was strongly correlated with the father's ethnicity, with school and youth-group attendance and with educational level. All other things being equal, early sexual intercourse was most likely to occur among the Tikari-Nsoh and the Bamiléké: Some 54–55% of the young people belonging to these groups had engaged in sexual activity before age 16, compared with only 32% of Bali-Ngemba young people. Precocious sexual intercourse was least likely among young people whose father belonged to ethnic groups that were not native to Northwest Province (30%).

School attendance was positively correlated with precocious entry into sexual activity. However, the relationship between educational level and early first intercourse was negative, especially after middle school. All else being equal, 49% of young people with a primary or middle-school education had had intercourse before age 16, compared with 29% of those with a high school education. Contrary to the result expected, youth-group attendance was negatively correlated with early initiation of sexual activity.

The relationship between gender and age at first intercourse became highly significant after the effects of other factors were taken into account, with 50% of males and 35% of females having had sex before age 16.

Other Sexual Behaviors

Among young people who had already had sexual intercourse, 27% had multiple sexual partners at the time of the survey, while 16% said that they had no current partner (data not shown). Forty-one percent of sexually experienced young people had had casual sexual intercourse dur-

ing the previous 12 months. Only 25% of the young people who were sexually active at the time of the survey were using condoms. At every age, the proportion of males who had several concurrent sexual partners or who had had casual sex was higher than that of females.

These indicators of sexual behavior also correlated with characteristics of the young people and their families (Table 4). Compared with sexually experienced young people whose father's ethnic group was not native to Northwest Province, for example, those whose father belonged to the Bali-Ngemba, Bamiléké, Makon-Banyague or "other Northwest" groups were significantly more likely to be sexually active at the time of the survey (odds ratios of 1.1 each). Sexual activity was significantly less common among youths whose father was a farmer or fisherman than among those whose father was an office worker (0.6). It was more common among those whose parents did not live together (1.5), those whose parents had a polygamous marriage (1.8) and those living in a poor household (1.4) than among youths without those characteristics. In addition, compared with young people who lived with both parents, those who lived with their grandparents were significantly less likely to be sexually active (0.3), while those who lived alone, with a brother or sister or with one parent were more likely to be sexually active (1.2–1.6). Young people who had had intercourse before they were 16 were less likely than those who had not to be sexually active at the time of the survey (0.7).

Compared with young people whose father's ethnic group was foreign to Northwest Province, those whose father belonged to the Bamiléké were more likely to have more than one sexual partner at the time of the survey (odds ratio of 1.2), while those whose father belonged to the Metta or "other Northwest" groups were less likely to do so (0.7–0.8). The likelihood of having multiple partners was significantly higher among youths whose father was unemployed and those living in a household with an average standard of living (1.3–1.5); it was significantly lower among those whose father worked as a farmer or fisherman (0.6).

Compared with those who lived with both parents, youths who lived with their grandparents were significantly less likely to have multiple partners (odds ratio of 0.0), while those who lived alone, with one parent, with a sibling or with other persons were more likely to have more than one partner (1.9–4.0). Females were sig-

Table 4. Odd ratios from logistic regression analyses on the prob-

Characteristic	Sexually active	Multiple partners	Casual sex in past 12 months	Nonuse of condoms
Father's ethnicity				
Makon-Banyague	1.12*	1.11	1.05	1.16*
Bamiléké	1.10*	1.17*	1.07	1.30*
Bali-Ngemba	1.10*	0.93	0.94	0.93
Tikari-Nsoh	0.91	0.71	1.09	1.09
Metta	0.86	0.71*	0.79*	0.87*
Other Northwest	1.10*	0.75*	0.93	1.07
Foreigners (ref)	1.00	1.00	1.00	1.00
Father's job				
Not working	1.35	1.54*	0.86	2.07*
Agriculture/fishing/				
livestock	0.61*	0.57*	0.83	0.75
Commerce	1.16	0.76	1.22	0.47*
Manager/office	4.00	4.00	4.00	4.00
worker (ref)	1.00	1.00	1.00	1.00
Skilled worker	1.25	1.00	1.08	0.53*
Specialized worker	0.74	1.12	1.34	1.03
Other	1.17	1.49	0.82	3.94*
Parents' type of mar				
Polygamous	1.75*	0.91	1.04	0.86
Monogamous (ref)	1.00	1.00	1.00	1.00
Cohabitation by par	ents			
Yes (ref)	1.00	1.00	1.00	1.00
No `´	1.54*	0.68	1.19*	1.09

0.88

1.29*

1.00

1.00

0.95

1.00

2.83*

4.02*

0.00*

2.75*

1.94*

1.00

0.95

0.59

1.38

0.91

1.00

1.38

0.78*

1.00

1.53*

1.00

Household standard of living†

Poor Average

Other

Alone

Yes (ref) No

None

Primary

Gender Female

Male (ref)

Yes No (ref)

High (ref)

Parents (ref)

at time of survey

Both parents (ref) One parent

Brother/sister

Grandparents

Other persons Sufficient resources

Educational level

Middle school

High school (ref)

Higher education

1.43*

0.94

1.00

1.00

0.97

1.00

1.64*

1.23*

0.30*

1.49*

1.23

1.00

0.97

1.41

0.91

1.31

1.00

0.50

1.05

1.00

1.00

*p≤.05. †This variable is based on the presence of selected durable goods

First sexual intercourse before age 16 0.72*

etc.) in the household. Note: ref=reference group.

Persons with whom respondent lived

1.29* 1.35* 1.00 Persons with whom respondent lived during childhood 1.00

1.28*

1.00

1.65*

1.15*

0.49*

2.26*

0.84*

1.00

1.23*

1.02

1.46*

1.27*

1.00

1.11

0.59*

1.00

1.51*

1.00

	1.00 1.12 0.65 1.07 0.48 1.68	2* 5* 7 8*	
	1.00 1.12		
	0.74 0.92 1.27 1.00 0.93	2 7*)	
	1.05 1.00		
	1.06		
(tele	evisio	n, ra	dio,

0.79*

0.95

1.00

1.00

0.76*

lishing good and open relationships with their children and to give appropriate advice in the area of sex education. These results also bear witness to the need for introducing sex education programs in schools and youth centers.

The young people surveyed were well informed about AIDS, its main means of transmission and methods of prevention, but they continued to have sexual relations that could expose them to infection. Thus, informing and educating young people about sex and AIDS does not seem to be sufficient to motivate them to change their sexual behaviors.

The results of this study reveal that nearly half of the young people surveyed had had sexual intercourse before age 16, that most were sexually active at the time of the survey and that about one-third had several sex partners, but that only one-fourth were using condoms. Moreover, two out of five had had casual sex during the 12 months preceding the survey. Consequently, AIDS prevention programs should place a greater emphasis on fidelity, reducing the number of sex partners and using condoms.

The fact that the percentage of young people using condoms in Bamenda was far higher than what has been found at the national level in other studies suggests that AIDS awareness may have positively influenced condom use in Bamenda. This awareness may also explain at least part of the difference observed in Bamenda between the percentage of young people who are sexually active and the percentages who have several partners or engage casual sex. These differences support recommendations for AIDS prevention programs.

Our differential analyses of the sexual behavior of young people showed that the age at which first sexual intercourse occurs is correlated with social and cultural factors, while sexual risk behaviors are related both to those factors and to economic factors.

The differences in sexual behavior by ethnicity lend support to the theories of Murdock, whose pertinence has long been recognized by other researchers searching for the causes of infertility in Central Africa. Consequently, these differences may reflect differences in sexual permissiveness among ethnic groups in Northwest Province. This explanation, however, seems insufficient, because the positive relationship observed between membership in the Bamiléké or Tikari-Nsoh group—the two groups that impose strict control of sexual mores—and the be-

haviors involved can only be explained by a tendency to rebel against traditional sexual norms.

The relationship between precocious sexual intercourse and school attendance may reflect the fact that school promotes the meeting of young people of the opposite sex in an environment that is not controlled by their family. Indeed, curiosity and the influence of schoolmates or friends were mentioned by many of them as reasons for their first sexual intercourse. The negative relationship between educational level and precocious first sexual intercourse, which confirms findings of studies done in Benin¹⁰ and in Cameroon, 11 may reflect the fact that remaining in school for a long time delays social maturation.

As the results of this study have revealed a strong positive relationship between early first intercourse and most of the other sexual behaviors being studied, actions aimed at delaying entry into sexual activity by young people should also be part of the content of the AIDS prevention programs in Africa. Parents should monitor their adolescent children's choice of friends. The finding that almost four in 10 young women said that their first sexual experience had not been voluntary suggests that parents need to mobilize their communities against sexual violence toward girls.

Young peoples' sexual risk behaviors are influenced by both cultural factors and economic factors; this means that their environment and living conditions are extremely important. In addition, it underscores the importance of the living arrangements of parents and their cohabitation with their young children. As noted in a study set in Uganda, "most of the students' sexual activities occurred when parents were away or when the students were staying with relatives. Also, although numbers were small, generally orphans and children living with single parents were more likely to engage in sexual activities...."12 Young people who live with their parents are less likely to have emotional problems, 13 and their behavior is more likely to be under their parents' control.

The results of this study suggest that noncohabitation by parents, conjugal instability and noncohabitation with children may raise the risk that adolescents will engage in risky sexual activity. Consequently, sensitization of parents about these problems should be included in AIDS prevention programs intended to motivate adolescents to avoid risky sex-

ual behaviors.

As young people who have unemployed fathers, live in poor households or have insufficient resources to meet their needs are at greater risk than their peers of having several sex partners and of engaging in casual sexual intercourse, poverty appears to contribute to risky sexual activity. To satisfy their material needs, they may engage in sexual activity with multiple partners or casual partners or agree to have sex without a condom. Data derived from qualitative research conducted along with our survey confirm these results, as most of the young women who participated in individual interviews declared that they had sexual intercourse in exchange for money, gifts or clothing:

"Because I have children, I cannot have sexual relations with a man if he does not give me something."—A single 21-year-old woman

"I got involved in this sexual life because I lost my parents, I have two children and I don't have a husband to help me resolve my problems and those of my children....This life provides me the wherewithal I need to solve my little family's problems, but if I get married or find a job, I'll give it up, because it exposes me to a lot of risks."—A single 19-year-old woman

"I can't have sexual relations with boys at all because they don't have the wherewithal. However, responsible men almost all help me when I have money problems."—A single 21-year-old woman

Men, on the other hand, frequently adopt risky sexual behavior to procure the maximum gratification of their sexual desires. However, adolescent males claim that some of their schoolmates and friends do so for economic reasons. This is particularly true of boys from poor families, who may receive aid from girls in the form of work (such as domestic help) or money, or assistance from married women who clandestinely keep single boys in exchange for sexual gratification. Still, girls are particularly likely to engage in risky sex for economic reasons, which negatively influences their power to require use of condoms during sexual intercourse. Improvement of the living conditions of families in Bamenda, particularly those of single mothers, might well reduce the transmission of HIV over the long term.

References

1. Romaniuk A, La Fécondité des Populations Congolaises, Paris/La Haye: Mouton, 1967; Laurentin R, Infécondité en Afrique Noire: Maladies et Conséquences Sociales, Paris: Maason, 1974; Sala-Diakanda M, Infécondité de certaines ethnies, in: Tabutin D, ed., *Population et Sociétés en Afrique au Sud du Sahara*, Paris: L'Harmattan, 1988, pp. 191–216; and Evina A, Infécondité et sous-fécondité: evaluation et recherche des facteurs. Le cas du Cameroun, *Cahiers de l'IFORD* (Institut de Formation et de Recherche Démographiques), No. 1, Yaoundé, Cameroon: IFORD, 1990.

- 2. Cameron DW et al., Female to male transmission of human immunodeficiency virus type 1: risk factors for seroconversion in men, Lancet, 1989, 2(8660):403-407; Plummer FA et al., Cofactors in male-female transmission of human immunodeficiency virus type 2, Journal of Infectious Diseases, 1991, 163(2):233-239; Laga M, Nzila N and Goeman J, The interrelationship of sexually transmitted diseases and HIV infection: implications for the control of both epidemics in Africa, AIDS, 1991, 5(Suppl 1):S55-S63; Laga M et al., Non-ulcerative sexually transmitted diseases as risk factors for HIV-1 transmission in women: results from a cohort study, AIDS, 1993, 7(1):95-102; Auvert B, Epidémiologie du sida en Afrique, in: Vallin J, ed., Populations Africaines et SIDA, Paris: La Découverte, 1994, pp. 63-118; and Grosskurth H et al., Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania: randomised controlled trial, Lancet, 1995, 346(8974):530-536.
- 3. Oum T, Maternité et paternité précoces au Cameroun, research report, Yaoundé, Cameroon: Project Women, Health and Development, 1993; Ilinimugabo A, Walla G and Azombo M, Causes et conséquences des grossesses chez les adolescentes au Cameroun, research report, Series 3, Yaoundé, Cameroon: Center for African Family Studies and Cameroon National Association for Family Welfare, 1996; Fewou A, Contribution à l'étude de la grossesse et de l'accouchement chez la femme âgée à Yaoundé, doctoral dissertation, Yaoundé, Cameroon: University Center of Health Sciences (CUSS), University of Yaoundé I, 1983; Boerma JF, Maternal mortality in sub-Saharan Africa: levels, causes and interventions, Annales de l'IFORD, 1988, 12(1):49-68; Dackam N, Mfoulou R and Sala-Diakanda M. Population et Santé Familiale en Afrique. London: International Planned Parenthood Federation, 1990; Akoto E, Déterminants Socio-Culturels de la Mortalité des Enfants en Afrique Noire. Hypothèses et Recherche d'Explication, Louvain-la-Neuve, France: Academia, 1993; Nasah BT et al., The risk approach for reducing maternal mortality: the Yaoundé experience, research report, Yaoundé, Cameroon: World Health Organization-Human Reproduction Project-Faculty of Medicine and Biomedical Sciences, University of Yaoundé I (WHO-HRP-FMBS), 1996; and Leke R, Replication of high risk approach in pilot rural areas in Cameroon: first phase, study report, Yaoundé, Cameroon: WHO-HRP-FMBS,
- 4. Trebucq A, Adolescence, comportement sexuel et risque d'infection à VIH à Yaoundé, Yaoundé, Cameroon: Organisation pour la lutte contre les endémies en Afrique Centrale (OCEAC)/Ministère de la Santé (MINISANTE), 1988; Ngoule D, Les infections VIH et les femmes au Cameroun: enquête sur les connaissances, attitudes, croyances et pratiques dans les localités de Yaoundé et Ebolowa, Yaoundé, Cameroon: CUSS, 1989; Houehouegbe A, Evina A and Rafalimanana H, Enquête sur les connaissances, attitudes, pratiques et croyances relatives au sida dans les provinces du sud-ouest et nordouest Cameroun, Yaoundé, Cameroon: IFORD/German Technical Corporation (GTZ)/MINISANTE, 1990; Louis JP et al., Comportements sexuels et risque d'infection à VIH: enquête (sur les connaissances, attitudes, croyances et pratiques) en milieu scolaire à Yaoundé, Yaoundé, Cameroon: OCEAC/Institut français de recherche scientifique pour le développement en coopération (ORSTOM)/Unité de lutte contre le sida (ULS), 1990; Songue P, Etude anthropologique portant sur les connaissances et comportements des prostituées et leurs clients en matière de sexualité et sida à Yaoundé, study report, Family Health International/AIDSTECH/MIN-

ISANTE, 1990; Tchuppo JP et al., Résistance au changement des conduites sexuelles face au sida: une étude psychologique des obstacles à l'utilisation des préservatifs (le cas des étudiants de l'Université de Yaoundé), study report, Yaoundé, Cameroon: University of Yaoundé I, 1990; Garcia-Calleja J et al., KABP and HIV seroprevalence study in Yabassi district (Littoral Cameroon), Yaoundé, Cameroon: ULS/GTZ/WHO, 1992; Chambon R et al., MST et SIDA dans un marché frontalier au Cameroun: Enquête sur les Connaissances, Attitudes, Croyances et Pratiques et de séroprévalence à Mbaïmboumn, Yaoundé, Cameroon: OCEAC/Association Française des Volontaires du Progrès/Centre Pasteur/ULS, Projet Fac Nord, 1993; Tchuppo JP et al., Les étudiants des universités de Douala et Yaoundé face au SIDA et aux MST: données qualitatives sur les connaissances, attitudes et pratiques, Yaoundé, Cameroon: AIDS-CAP/Population Services International, 1993; and Cheta C et al., Evaluation du projet de prévention des MST/SIDA à base communautaire dans quatre départements de la province de l'Extrême-Nord du Cameroun, Yaoundé, Cameroon: Institut de recherche et des études de comportement-Save the Children, 1996.

- 5. Cheta C and Rwenge M, Recension des travaux réalisés au Cameroun dans le domaine de la santé reproductive, study report, Projet AID:N/A/Santé Familiale et Prévention du Sida/OR, Yaoundé, Cameroon: IFORD, 1997.
- 6. Ilinimugabo A, Walla G and Azombo M, 1996, op. cit. (see reference 3); Barker G and Rich S, Influences on adolescent sexuality in Nigeria and Kenya: findings from recent focus-group discussions, *Studies in Family Planning*, 1992, 23(3):199–210; Naré C, Katz K and Tolley E, Adolescents' access to reproductive health and family planning services in Dakar (Senegal), *African Journal of Reproductive Health*, 1997, 1(2):15–25; and Madzouka J, La transmission des normes aux jeunes: quels modes préférentiels? in: Union for African Population Studies (UAPS), *Femme, Famille et Population*, Vol. 1. Communications sollicitées, Dakar, Senegal: UAPS, 1991, pp. 193–204.
- 7. Madzouka J, 1991, op. cit. (see reference 6).
- **8.** Murdock GP, Culture correlates of the regulation of premarital sex behavior, in: Manners RA, ed., *Process and Pattern in Culture*, Chicago, IL, USA: Aldine, 1964, pp. 399–410.
- 9. Romaniuk A, 1967, op. cit. (see reference 1); Laurentin R, 1974, op. cit. (see reference 1); and Sala-Diakanda M, 1988, op. cit. (see reference 1).
- **10.** Kouton E, Evaluation et recherche des facteurs de la fécondité précoce au Bénin, *Cahiers de l'IFORD*, No. 3, Yaoundé, Cameroon: IFORD, 1992.
- **11.** Ilinimugabo A, Walla G and Azombo M, 1996, op. cit. (see reference 3).
- 12. Twa-Twa JM, The role of the environment in the sexual activity of school students in Tororo and Pallisa districts of Uganda, *Health Transition Review*, 1997, 7(Suppl):67–82.
- **13.** Caldwell JC et al., African families and AIDS: context, reactions and potential interventions, *Health Transition Review*, 1993, 3(Suppl):1–16.

Resumen

Contexto: Los aumentos de los niveles de conocimiento del problema del VIH y de información acerca de su transmisión y prevención, son factores que no siempre están asociados con la disminución de una conducta sexual de riesgo entre los jóvenes de Camerún. Se necesita mayor información acerca de los factores relacionados con estas conductas.

Métodos: En 1995, se recopilaron datos sobre la conducta sexual y las características sociales, demográficas y económicas de 671 jóvenes residentes en Bamenda, Camerún. Se utilizaron técnicas de análisis de multivariables para analizar los efectos de estas características con respecto a los siguientes factores: iniciación temprana de las relaciones sexuales, las relaciones sexuales con varias personas, las relaciones sexuales casuales y la falta de uso del condón.

Resultados: La edad promedio de la primera relación sexual fue de 15,6 años entre los varones y 15,8 entre las mujeres. La principal razón para iniciar las relaciones sexuales fue la curiosidad (53% de los varones y 42% de las mujeres). Sin embargo, aproximadamente el 37% de las mujeres y el 30% de los varones indicaron que su primera relación sexual no fue voluntaria. Los factores más importantes que incidían en la iniciación sexual antes de los 16 años fueron la etnicidad del padre, haber asistido a la escuela y haber completado enseñanza primaria o los primeros años de secundaria. Los factores más sistemáticamente relacionados con las conductas sexuales de riesgo fueron la composición de la familia y el nivel socioeconómico del hogar. Al comparar a los jóvenes que vivían en un hogar con un elevado nivel socioeconómico con sus pares de hogares de bajos recursos se verificó que los últimos eran 1,4 veces más proclives a ser sexualmente activos y 1,3 veces más proclives a haber mantenido relaciones sexuales casuales durante el año anterior. Los jóvenes que vivían con un solo padre eran 1,6 veces más proclives a ser sexualmente activos que aquellos que vivían con ambos padres; 2,8 veces más proclives a tener varias parejas en el mismo momento, 1,7 veces a haber mantenido relaciones sexuales durante el año anterior y 1,1 veces a no estar usando condones. Vivir con sus abuelos resultó tener un efecto de protección, en tanto que vivir solo con otros hermanos, o con otras personas, generalmente aumentaba la probabilidad de involucrarse en conductas sexuales riesgosas.

Conclusiones: Los jóvenes de bajos recursos económicos y aquellos que viven en ambientes familiares menos estables son más proclives que otros jóvenes a observar conductas sexuales que les exponen al riesgo de contraer el SIDA. Mejorar las condiciones de vida de las familias, especialmente las de aquellas familias encabezadas por una mujer soltera, podría ayudar a desalentar el contagio de esta enfermedad.

Résumé

Contexte: L'augmentation du niveau de sensibilisation au VIH et de connaissance quant à sa transmission et à sa prévention n'a pas tou-(continued on page 130)

Sexual Risk Behaviors Among...

(continued from page 123)

jours été associée à une diminution des comportements sexuels à risques parmi les jeunes Camerounais. Les facteurs associés à ces comportements ne sont pas suffisamment documentés.

Méthodes: Des données relatives aux caractéristiques socio-économiques et démographiques et aux comportements sexuels ont été recueillies auprès de 671 jeunes résidents de Bamenda, au Cameroun, en 1995. Les effets de ces caractéristiques sur les rapports sexuels précoces, avec plusieurs partenaires et de passage et la non-utilisation du préservatif ont été analysés au moyen de techniques multivariées.

Résultats: L'âge moyen au moment des premiers rapports sexuels était de 15,6 ans pour les garçons, et 15,8 ans pour les filles. La rai-

son principale de ces premiers rapports était une question de curiosité (53% des garçons et 42% des filles). Environ 37% des filles et 30% des garçons ont toutefois indiqué que leurs premiers rapports sexuels n'avaient pas été volontaires. Les facteurs les plus importants d'initiation sexuelle avant l'âge de 16 ans étaient l'origine ethnique du père, la scolarisation et l'instruction au niveau primaire ou du premier cycle secondaire. La composition de la famille et le niveau de vie du foyer se sont avérés les facteurs le plus régulièrement associés aux comportements sexuels à risques. Par rapport aux jeunes vivant dans un foyer jouissant d'un niveau de vie élevé, les plus pauvres étaient 1,4 fois plus susceptibles d'être sexuellement actifs au moment de l'enquête et 1,3 fois plus susceptibles d'avoir eu des rapports sexuels de passage au cours de l'année précédente. Les jeunes vivant avec un seul parent étaient 1,6 fois plus susceptibles que ceux

membres d'un foyer comprenant deux parents d'être sexuellement actifs, 2,8 fois plus susceptibles d'avoir plusieurs partenaires, 1,7 fois plus susceptibles d'avoir eu des rapports de passage durant l'année précédente et 1,1 fois plus susceptibles de ne pas utiliser le préservatif. Le partage du foyer des grands-parents avait généralement un effet protecteur, tandis que la vie avec un frère ou une sœur, seul ou seule ou avec d'autres personnes accroissait généralement la probabilité d'adoption de comportements sexuels à risques.

Conclusions: Les jeunes économiquement démunis et ceux vivant dans des milieux moins stables sont plus susceptibles que les autres d'adopter des comportements sexuels leur faisant courir le risque de contracter le sida. L'amélioration des conditions de vie des familles—celles dirigées par des femmes célibataires, surtout—pourrait aider à ralentir la propagation de la maladie.