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Social impediments to the prevention of the spread of HIV/AIDS in young adults in Cameroon State Universities

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ABSTRACT : The low socio-economic status of countries South of the Sahara, coupled with little education on sexuality and reproductive health, have favoured the vast majority of infections still occurring in developing countries. Information was collected with the aid of a pre-tested interviewer-administered questionnaire. A total of 565 young adults in the University Towns of Yaounde, Dchang, Bamednda, and Buea. Of the questionnaires returned 46% (261) were females and 54% (304) males aged mainly between 21-30 years. The survey showed that people began having intercourse at an early age, regardless of the sex of the subjects. 10% were virgins, 13% had their first sexual contact by the age 15. 18% had 3-5 and amazing 2% had 6-9 partners. Considering the perception of how soon they went to bed after the first meeting, 15% had done so on the same day, 22% a few days later, 29% weeks later and 34% months later. 37% had either been pregnant or impregnated someone in the past three years. 91% of these pregnancies were not carried to term. The average cost of abortion was 27 USD, with a range of 3-135 USD. On the whole, the respondents had some knowledge about STIs with 82% of the respondents describing it as a disease obtained through sex. 77% of the respondents had never had an STD, and of the 23% who had, reported gonorrhea as the predominant infection. Those who had STDs had reported to medical doctors (67%), nurses(12%), pharmacists (9%) and traditional doctors(2%). Their Views of the best method of AIDS prevention were diversified. 28% agreed that the best means was through the use of condoms, 32% rated behavioural change first and 39% subscribed for abstinence as the best approach. Further more, most of these students engage in more leisure activities rather than lucrative hobbies.

Key words: Young adults, Behavioural pattern, Condom use, Sexuality, Leisure.

Introduction

The HIV pandemic continues to evolve in magnitude and diversity with an estimated 34 million adults and children currently infected (Cock *et al.*). Despite the reduction in the number of new cases in the United States and Western Europe (Cock *et al.*, 2000), the vast majority of infections still occur in developing countries with Africa being the most affected by the AIDS pandemic (23 million). (By the end of 1989, of the 3 million people infected by the HIV, about 300,000 had already presented with AIDS symptoms (Georges *et al.*, 1990)).

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With a population of over 600 million, sub-Saharan Africa accounts for over two-thirds of the world's HIV-infected persons and 80% of the world's HIV-infected women and children (Cock *et al.*, 2000). Occurring as sporadic cases in the 1970s, HIV infection has increased to epidemic proportions and today, it could reach the prevalence of about 1 – 20% in the general population. Transmission is principally through heterosexual means. High-risk populations include commercial sex workers and their clients, persons with genital ulcers from other sexually transmissible diseases, **IDVs**, etc. The low socio-economic status of countries south of the Sahara, coupled with little education on sexuality and reproductive health, both favour the transmission of HIV (Temin *et al.*, 1999).

In Africa, three modes of transmission are distinguished. Type I, found mainly in South Africa, is transmitted through homosexuality and intravenous drug use. Type II, predominant in East, West and Central (Black) Africa, is bi-directional through heterosexuality which results in epidemics in large towns (Georges *et al.*, 1990). Adolescents especially in Cameroon had an HIV transmission rate of 12.8% in 2001 (UNAIDS/WHO Fact Sheet for Cameroon, 2002). Although physical attraction is the main reason for most cases of romantic relationships among adolescents, the desire for material and/or financial gain closely follows as a motivation for sexual relationships which also favours HIV transmission (Temin *et al.*, 1999).

Calculations on the prevalence of HIV/AIDS in Cameroon are based on previously published estimates as well as recent trends in HIV/AIDS surveillance in various populations (details). Data on HIV/AIDS has been available from seroprevalence among antenatal clinic attendees, commercial sex-workers in major towns and highway truck drivers. This has been published in national reports, scientific publications and international conferences. The sexually active population is found to be those between the ages of 15 and 49.

Since the description of the first HIV case in 1985 (Marx, 1985), there has been a steady increase in the prevalence of this virus in the country. Seroprevalence among those who attend antenatal clinic in urban areas rose from 1% in the early '80s to 5%, while in suburban areas the increase went from 1% in 1989 to 8% in 1996 for both cases. Seroprevalence rates among sex workers increased from 6% in 1987 to 30% in 1993 in the major towns while about 15% of highway truck drivers tested positive in 1994 (UNAIDS/WHO Fact sheet for Cameroon, 2002). Data from the UNAIDS/WHO fact sheet for Cameroon reveals that at the end of 1999, the prevalence of HIV infection in Cameroon stood at 7.73%. The cumulative number of adults and children infected with HIV/AIDS was 540,000, which is 4.5% of the total population. It is estimated that in 1999 alone, 52,000 people died of AIDS and since its beginning, the epidemic has claimed 430,000 lives in Cameroon. At the end of the year 2000, the National Committee for the Fight Against AIDS published an epidemiological fact sheet for Cameroon in which the prevalence of HIV/AIDS stood at 11% for the year 2000. This value is 22 times higher than the 1987 prevalence and one and a half times higher than the figure of 1999, the previous year. The main route of transmission was through unprotected heterosexual intercourse (41%). However, mother-to-child transmission was rated at 10%. The cumulative number of infected people was 937,000 and one out of every nine Cameroonians in the sexually active population was said to be infected. The cumulative number of reported AIDS cases between 1986 and 2000 was 33,000 people. Between January and October 2000, 4,363 new cases were identified. However, this figure was said to probably represent 50% of the total values due to non-declaration of many cases and lack of diagnostic facilities.

The investigation was aimed at identifying the social barriers to the prevention of the spread of HIV/AIDS in students in Cameroon state universities and therefore providing important insights into young people's knowledge, attitudes and practice towards STDs and HIV prevention. Results from the analysis will suggest possible ways of decreasing STD and HIV/AIDS prevalence by promoting responsible prevention and treatment-seeking behaviour.

METHODOLOGY

Questionnaire

A questionnaire (Table 1) was designed by Fobang Foundation in 2004 to determine the social impediments in the prevention of the spread of HIV/AIDS in view of designing new ways of reaching out to students in the struggle to prevent the spread of the disease. This cohort of students was chosen randomly from the state Universities. The age group was chosen based on the previously cited statistics which showed that those of this age group were very much exposed to the AIDS surge (Meekers *et al*

2003) It was administered after informed consent among university students. Some were filled out in classrooms, others on street corners and in bars in university towns where the students were already on holidays. The compliance rate was 94.16% because most of the time, the questionnaires were filled out in the presence of the surveyors and dropped anonymously into a bag. The few who took them away filled them out later and were traced to their homes. The study was the first extensive sexual habits survey among university students.

Table 1: Questions on sexual attitudes and practices.

Question		Yes (%)	No (%)
Do you trust your partner to know the right thing?	(n=565)	57	43
Do you often let your partners make decisions for you?	(n=565)	21	79
Have you ever been raped?	(n=261)	9	91
Have you ever been gang-raped?	(n=261)	1	99
Were you conscious during the rape?	(n=261)	80	20
Have you ever been convinced by a friend to go out with someone who		26	74
Is not really your choice?	(n=565)		
Do you seek the opinion of your colleague or friend to go out with		55	45
Someone you like?	(n=565)		
Have you ever been involved in homosexuality?	(n=565)	2	98
Have you ever been involved in orgies?	(n=565)	2	98

Population Characteristics

The study was carried out among 565 young adults in the university towns of Yaounde, Dchang, Bamenda and Buea. Of the questionnaires returned 46% (261) were females and 54% (304) males. The age range had a predominance of 21-30 age groups (88%) that make up the bulk of university students. However, some 8% were between the ages of 15 and 20 and 4% above 30 years.

Results

Leisure Activities

Of these students, 49% lived in large towns of more than 20,000 people, 38% came from small towns of about 5,000, 8% from large villages of about 3,000 people and 5% from small villages of 500 to 1000 inhabitants. Forty-nine percent (49) had lived in their localities for 1-10 years, 35% for 11-20 years and 16% for more than 20 years. Most of the students spent their holidays in big towns (62%) while 19% and 10% respectively did so in small towns and large villages and 9% in small villages or other localities. Most of those who lived in big towns took to more leisure activities rather than to lucrative hobbies. The remaining 8% spent this time in small villages or other unidentified localities.

Comparing their leisure activities (hobbies) and summer activities, 53% spent their holidays in recreational activities (33% did listen to music, dance, sing, go out, visit friends and relatives and travel for sightseeing, 11% did sports of different kinds and 9% spent their time watching films on TV or in cinema halls), 32% spent their time on lucrative activities, 12% carried out academically-related activities (reading, writing, research, teaching, and the like) while a few(3%) indulged in gambling.

Findings for Leisure

These leisure activities were financially supported by monthly allowances which ranged from 1500 to 100,000 CFA frs either from parents or relatives or from personal efforts. A good number of the

students received monthly allowances of up to 10,000 CFA frs, but then 73% of them spent averagely 10,000frs, 13% between 12,500 and 90.000frs and 14% spent nothing on leisure.

Drinking/Smoking

Ten percent (57) admitted to smoking, 70% of whom did so just for fun and 30% as a dependent activity. Just 3% had ever taken drugs or smoked marijuana. 35% (194) admitted to drinking. Consumption rate per week included those who took 1 bottle (22%), 2-3 bottles (15%), 4-10 bottles (10%); a troubling 2% took 12-15 bottles a week while another 2% took 17-54 bottles.

Movies

The frequency with which movie theatres, cinema halls and video clubs were visited (Fig. 1) was always (7%), often (39%), on special invitation (37%) and 17% never. The genre of movies watched (Fig. 2) included pornography (12%), drama (31%), police/detection (37%), action (14%), war (3%) and karate (3%). Students went to nightclubs always (4%), often (21%), on invitation (49%) or never (26%).

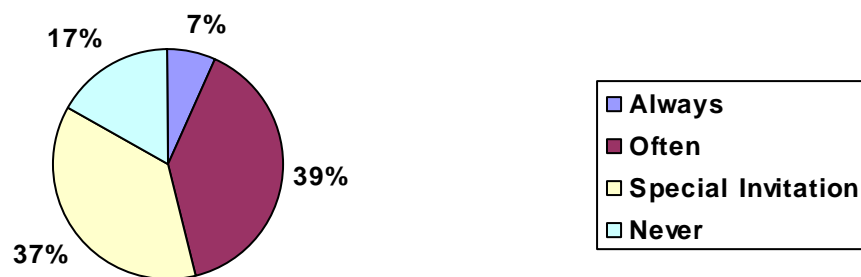


Fig. 1: The frequency with which movies were visited.

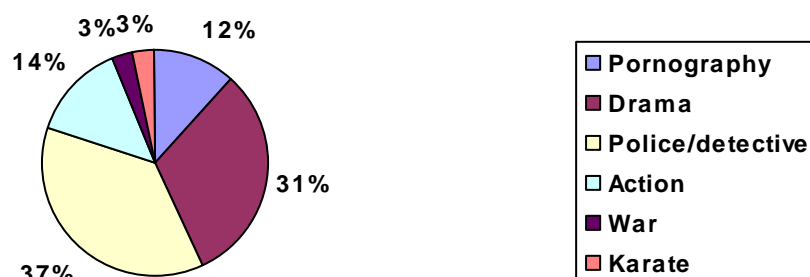


Fig. 2: Genre of movies watched.

Communication with Parent (Parental Involvement)

The level of education and employment status of the parents or guardians of the subjects were investigated to assess the involvement of the parents on sexuality education (Table 2). If they are ignorant of such issues, then they are not the ideal source of information. Some 42% of the mother or

female guardians had paid or salaried jobs in contrast to 58% who did not. Of the non-salaried ones, 57% of them were self-employed.

Among the subjects, 91% still had their parents alive. The freedom with which sex is discussed at home was inquired. It was found that 38% conversed about various topics on sexual and reproductive health with their parents or guardians as matters came up, 30% did so occasionally while 32% never discussed sex with them. Some subjects had been scolded into silence by a parent or guardian after asking a question on sex (11%, while 72% had not been scolded and the rest did not remember the reaction. When discussing sex with friends or colleagues, 49% did so as issues arose, 50% regularly, but then some (1%) never did discuss with anyone. Ideas as to how to handle sexual issues could then be very divergent.

Table 2: Level of education of parent or guardian.

Level of Education	Male (%)	Female (%)
Primary	21	30
Secondary	21	26
University	20	12
Post-Secondary	15	9
Above a Masters	12	3
Illiterate in English and/or French	5	12
Don't know	4	5
Other	2	3

Sex-Related Attitudes and Practices

The study population had their first love at school (53%), or at home, inside the church or in the neighbourhood (17%), at social gatherings (17%) and some others met in shopping malls (7%) and others while traveling (6%). Of the 256 males responding, 81 (15%) reported having slept with female prostitute or commercial sex workers. Infact, commercial sex until now in Cameroon is a trade offered only by females. Depravity and low moral standards are also portrayed by a few cases of rape (9%), 1% of which was gang-raping during which most (75%) of the victims were conscious, 25 of the victims were unconscious.

The relationship between boys and girls was investigated and it turned out that for one third (32%) of the subjects it entailed sex. Another third (34%) thought it in terms of a reading (study) partner or playmate, while 20% chatting and 7% cancelled out all sexual activities. Most (68%) therefore did not consider the relationship as entailing sex.

The survey showed that people began having intercourse at an early age, regardless of the sex. Of the subjects, only 10% were still virgins. Of the 90% who already had sexual experience, 13% had had their first sexual contact by the age 15. The most commonly stated age of sexual debut was between 15 and 20 years, this for 61%, while 16% began after the age of 20.

At university level, the survey shows that nearly everybody is paired up. At the time the questionnaire was administered, 18% had 3-5 and amazing 2% had 6-9 partners. Considering the highest number of partners they had had within and up to a few weeks apart, a good number of the students were found to be quite frivolous. The number of partners implied that sex with multiple partners was common practice. The perception of how soon they went to bed after the first meeting showed 15% had done so on the same day, 22% a few days later, 29% weeks later and 34% months later. This indicated the ease with which the youths got sexually involved in their relationships. Is there underlying pressure from partners too?

But then, as to how soon they changed their minds about the choice made, 5% did the same day, 11% did a week later, 14% thought otherwise a few weeks to a month later. Therefore 26% change their minds within a month of getting paired up. Some 19% came back on their decision a few months later, and for 11% it was a matter of some years. Some hardly or never changed their minds about their partners (14%). Some 26% of those interviewed changed partners as often as was necessary or possible. Altogether, 86% changed their minds in the long-run.

Addressing the issue of homosexuality, half of the subjects (50%) thought it was a condemnable and degrading act to the society. Twenty-seven percent (27%) thought it was a natural biological or

psychological stray reaction, while 9% thought it was something OK. Some 12% had no opinion about it, while 2% took homosexuality to be an STD reservoir.

Pregnancy and Abortion

Results showed that medical check-up was not the preoccupation of most subjects. While 20% never went, 60 % of the students went for a medical check-up only when they felt as or forced to for a public examination or for obtaining a visa. The remaining 20% went for voluntary medical check-ups on a regular basis. When asked why they did not pay regular health visit to the medical facilities, 58 % said their reasons were financial, some 28% out of negligence, 11% were just unwilling to have it done, while 3% complained of not knowing whom to address their health problems.

The pregnancy rate was high among students. Thirty seven percent (37%) had either been pregnant or impregnated someone in the past three years. Of these pregnancies, 91% were not carried to term. Obviously then, of the abortions (56%) had had one, one-quarter (25%) two, 7% three, 9% had had more than three handled by medical doctors in public practice(40%) or in private practice(30%). Medical students had handled 10%, nurses 8%, traditional doctors 6%, while some 6% were performed by unidentified individuals.

The average cost of an abortion (medications excluded) in CFA was 20,000 frs (27.00 USD) for 42 %, while some 24% paid as low as between 2,000-10,000frs and 1% paid as high as 100,000frs. Students bore the cost of the abortions themselves (54% or sought financial assistance from friends (35%), parents (4% or relatives (7%). Of those who had gone through an abortion, 6% would repeat it, 70% would not and 24% were undecided as to whether or not they would do it. Most parents were never told of their children's involvement in abortions (93%).

Knowledge of STDs and HIV

On the whole, the participants had some knowledge about STDs (Fig. 3), and when asked what a Sexually Transmissible Disease (STD) is, 82% described it as a diseases obtained through sex, though 15% did not know how to define the term. The rest (3%) gave varied answers. Topping the list was gonorrhea (30%), followed by syphilis (29%), then HIV/AIDS (19%) cited among the STDs they knew. And then a few named chlamydiasis (6%), herpes (4%), candidiasis (4%) and a host of others (8%). Going from knowledge to experience, 77% of the students had never had an STD, and of the 23% who had had, they reported gonorrhea as the predominant infection though signs and symptoms were not discussed (Table 4). Those who had had STDs had reported to medical doctors (67%). While 12% had consulted nurses, 9% went to pharmacists directly for self-prescription or self-treatment. Few (2%) sought help from traditional doctors. Some (10%) turned to their friends, who may have been ill and could tell them they had used.

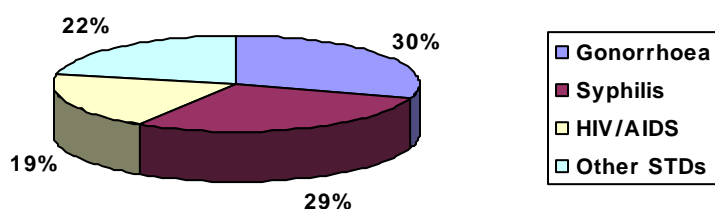


Fig. 3: Knowledge of STDs and AIDS.

Table 3: Self-reporting of STDs by students in Cameroonian Universities.

STD	Percentage (%)	(n=565)
Gonorrhoea	44	
Syphilis	16	
Candidiasis	13	
Chlamydia	8	
Urethritis	5	
Trichomoniasis	4	
Unidentified STDs	4	
Herpes SV2	2	
Staphylococcus	1	
AIDS	1	
Unrelated answers	2	

Table 4: Knowledge of possible routes of HIV transmission.

HIV Transmission Routes	Percentage (%)	(n=565)
Sex	41	
Blood	35	
Infected Objects	15	
Childbirth (Perinatal, Placenta)	5	
Body fluids (Saliva, sperm, breast milk, ...)	1	
Infected persons, Drugs, Transplants, Accidents, Homosexuals, Infections not related to sex	1	
Don't know	1	
Unrelated answers	1	

This survey revealed that almost all the students (99%) knew that AIDS is caused by the HIV virus (Table 5). However, 4% did not know what the AIDS abbreviation stood for. Less than half (41%) cited sex as one route for HIV transmission and 15% by infected objects and 5% from mother to child.

Generally, it was clear from the answers that the participants knew that AIDS is transmissible through blood-to-blood contact. Other means of infection were stated. There is a good knowledge of STDs and HIV/AIDS but few realize there is a link because only 1% considered AIDS as an STD and only 2% mentioned other STDs as opportunistic infections of AIDS.

Contact with infected blood can be inadvertently made through many routes. In most of such cases, it can be avoided simply by taking necessary precautions or sensitizing others. To find out if the students had probably been exposed to AIDS virus through risky situations other than sex, a certain number of situations were raised through which an HIV infection can be transmitted. Their answers are listed below in Table 6. Insistence on dental equipment being sterilized before use was verified by 79%. Barbic equipment being sterilized (simply by wiping with alcohol) after use on another client was imposed by some. Many (59%) admitted having queued up for a haircut, in which case the right precautions taken would curtail danger. Traditional vaccination was common practice (64%). The positive thing was that most of those who practiced it (63%) were conscious of the importance of using personal blades to avoid infection from others. For those who had been victims (13%) or helped others

involved in an accident, what risks did they run in carrying out such assistance without glove protection as some 14% had done? And worse still, in the case where they themselves had wounds (5%)?

About 57% of them said they had seen an AIDS patient. Describing the symptoms and appearance, 49% of these reported that the AIDS patients looked bony and emaciated while others found them pale (15%) and weak (13%), and some with rashes and skin diseases (3%). other indications were that they looked frightful (5%), sad and depressed (5%), had scanty hair (2%) and were diarrheic (2%). It turned out that they all knew someone who had died of AIDS (19% a relative, 14% friend, 2% a colleague and 65% someone else). Fifteen percent (15% had suspected a friend, 16% a relative, 4% a colleague and 65% some other person of having died of AIDS although when close relatives to these people were questioned, they gave other reasons for the deaths such as slow poison (29%), tuberculosis(10%), typhoid or malaria (14%), witchcraft(35%), diarrhea (7%) and others (5%).

Table 5: Perception of exposure to HIV.

Case	Yes (%)	No (%)	Don't Remember/ know (%)
Recent blood transfusion received without checking	2	97	1
Recent involvement in an accident or assistance given to a victim of an accident	13	85	2
Involvement in a bloody fight with both or many people wounded and/or bleeding	7	90	3
Injection received without knowledge of sterility of needle	11	84	5
Visit to a dentist without knowledge of sterility of instruments	11	79	10
Visit a barbing saloon for a haircut or shave on a queue	59	39	2
Barbing equipment or shaving clippers cleaned with alcohol before use on you at your request	29	58	13
Scarification done –traditional vaccination by blade cuts	64	32	4
Scarification done with personal blade	63	30	7
Hunting and/or killing animals (especially primates) and handling carcass with bare hands	6	93	1
Recent assistance of friend wounded in an accident with bare hands	14	83	3
Recent assistance given to a wounded person while having a wound	5	88	7

Knowledge of the Opportunistic Infections Ranked

The agony of this immunodeficiency syndrome was well-backed by the opportunistic infections which they knew as accompanying AIDS (Table 6). Tuberculosis was top on the list (27%), followed by diarrhoea (23%), Malaria (14%), Dermatoses (8%), Influenza (4%), others (11%) and 13% for unrelated answers. Perception of the most dangerous infectious diseases gave AIDS the first place (68%), followed by malaria (18%), meningitis (11%) then measles, syphilis and herpes, all at 1% each. Various reasons were given for AIDS being first on the list. Most said so because it has no cure or treatment (67%), it killed rapidly (17%) has the highest number of deaths (5%) and then a few gave other reasons (11%).

Table 6: Knowledge of opportunistic infections.

Opportunistic Infections	Percentage (%)
Tuberculosis (Cough)	27
Diarrhoea	23
Malaria (Fever)	14
Dermatoses (Skin infections)	8
Influenza (catarrh, cold)	4
Other (STD and OI)	4
Typhoid	3
Pneumonia (respiratory tract or lung infection)	2
Hepatitis B (liver problems, yellow fever)	1
Cancer	1
Unrelated answers	13

On stigma related behaviour, 19% said they would react coldly and avoid contact with anyone, be it a friend or relative, who has HIV/AIDS because of fear; 52% would offer comfort and love, 13% said they would remain indifferent and just continue associating with them, while 12% would pray for, teach and preach to the infected persons. The remaining 4% would not know what to do. For people who intentionally spread HIV, isolation, quarantine or imprisonment of such individuals was suggested by 49% of subjects. The solution of killing them was suggested by 16% while 7% thought they should be tagged, degraded and even given identification badges. Another group of 22% would wish to preach and talk to such people. Other solutions such as castration were proposed by the remaining 6%.

When it came to choosing between myth and fact, about belief in the existence of AIDS, 91% said that the disease exists, 4% said it does not and 5% had no opinion about the issue. Further questioning revealed the fact that actually, only 75% really believed in the existence of AIDS while 16% were uncertain and 8% then clearly expressed their disbelief.

Having earned a variety of local names, AIDS is also known colloquially as: Njappa, 4 x 2, 7 + 1, Helep, Khaba, Fami, Wamie, Slow poison, Douala fever, Extra dry, Flesh-eater, Slim course, Tilili, Cephals, Mystic D, Come-no-go, Come-we-go, American Invention to Discourage Sex, Advocacy Intended to Destroy Sailors, Serapo, Maladie du siècle (Disease of the century), Maladie nouvelle (New illness), Maladie des gourmands (Illness of the greedy), Maladie des amoureux (Illness of lovers), Maladie du sang (Blood disease) and mort subite (Sudden death).

AIDS Prevention Initiatives

Finding out about the best method of AIDS prevention, the answers were diversified. While 28% agreed that the best means was through the use of condoms, 32% rated behavioural change through health education as first and 39% subscribed for abstinence as the best approach, while 1% did not know. Yet of those who opted for condoms, 13% used them only when they felt as doing so, 30% did only when they had a new sexual partner and 7% only when their partner insisted. Thus, 63% of the subjects do not use condoms all the time. Whereas 13% would never use condoms, 37% always did even with their regular sexual partners. There is some disparity between what is considered right and what is actually practised. Only 6% said they did not use condoms for financial reasons. Some (29%) put pleasure before safety for want of a better feeling since they considered that condoms decreased the enjoyment of sex. Others (20%) yielded to pressure from partners in exchange for their personal safety. This could be due to the common but dangerous and erroneous perception that condom use communicates mistrust by those who demand it. It is claimed by some that they use the condom when they don't like the partner or when they want sex just for fun. But when they trust their partner, they do not use it. How soon after their first (new) sexual contact do they consider not using condoms anymore, (27%) insist on a test being done before stopping to use condoms. Others (37%) stop when

they come to mutual consent and 4% after the second contact and the rest were undecided. Some 38% had no reason for not using condoms. Reason ranged from fear of injury, time-consuming to use. Some fear the quality of the condoms available and others low grade penetrated by virus or sperms.

Most students (72%) said they had considered abstinence, yet it was actually subscribed to by 39%. Health education for behavioural change was advocated for by 32%. If abstinence was not the choice method, in committing to long-term relationships, 8% would volunteer to do an AIDS test while 24% would only do so on the insistence of the partner. However, 68% said they would do the test.

Of all the sources of information available in the study areas, students trusted medical doctors the most for knowledge on how to prevent AIDS (Table 7). They trusted them for valuable information on the education and treatment of young people with STDs and on the most effective sources of information. However, if they contracted the virus, some subjects (30%) said they would educate others about it, 15% would just wait to slowly die, 21% would put up a fight against HIV and 27% did not know what they would do. Some 6% reported they would do some unspecified thing, while 1% said they would infect others, in a deliberate attempt to spread the infection, not wishing to die alone. And as to where they would turn to for help if infected by the HIV, 40% chose doctors, 5% chose their families, 30% preferred counselling centres and 6% AIDS hospices. Nineteen percent (19%) did not know where they would go to. To obtain more information about HIV/AIDS, 43% would go to a doctor and 52% to counselling (information) centres, 2% would go to a Last Care Home and 1% each to family, friends or would not know. While (43%) did not know of any counselling centres, 57% who knew came from towns.

Table 7: Perception of AIDS prevention advocates.

Category	Most Talks From (%)	Most Believed (%)
Clergy	16	18
Friends	15	13
Doctors	37	43
Community Leaders	11	10
Journalists	17	12
Family	2	2
Others	2	2

AIDS Prevention Strategies

About prevention strategies (Table 8), 5% of the subjects knew just one principal method encouraged in Cameroon, 38% knew of 2, 53% of 3 and 4% of 4 such strategies. Most students rated sex education and sensitisation in all its various forms as the first of strategies encouraged in Cameroon through newspapers, magazines, posters, radio, TV and film, public education campaigns using electronic media, public health education campaigns, print media, schools and health seminars. Abstinence (15%) followed then condoms (10%), research (8%), faithfulness (6%) and counselling and testing (5%). The strategies the students would encourage were sex education and sensitisation in all its various forms at the top of the list (63%), condom use (12%), abstinence (11%), faithfulness between partners (8%), voluntary tests (3%) and others (3%). Other suggestions included the discouragement of polygamy and early marriage, discouragement of prostitution, consumption of drugs and alcohol, the careful use and sterilisation of razors, blades and shavers.

Table 8: AIDS prevention Strategies by young adults

Strategy	Not being encouraged (%)	Would encourage (%)
Education and Sensitisation	37	63
Abstinence	15	11
Condom distribution and use	10	12
Research	8	ND
Faithfulness	5	8
Tests	5	3
Others	19	3

Discussion

The survey provided important insights into young people's knowledge, attitudes and practice towards STDs and HIV/AIDS prevention. Results from the analysis suggest possible ways of decreasing STD and HIV/AIDS prevalence by promoting responsible prevention and treatment-seeking behaviour. Strengthening reproductive health programmes can help achieve these goals by addressing adolescent's perceptions of risk, emphasizing the links between HIV and STDs, decreasing barriers to service provision for youth, and involving parents and youths in programmes.

Addressing the risks associated with a range of sexual activities, including sex with a regular partner, is a step towards encouraging responsible behaviour. The findings revealed that 7% of the subject claimed ignorance as to what a boy-or girlfriend relationship entailed. Such could sooner or later get convinced by their partners and others that it entails sex. How many can stand on their convictions when pressurized by peers or the other party? How many withstand the temptation when friends tell them of their own personal exploits and experiences? How many yield to the pressure from the myths they hear from their friends? In some of these relationships, those involved were convinced by a friend to go out with a partner who was not really their choice. Accordingly, studies in students have shown that a student can easily be influenced by his peers (Salmivalli, *et al.*, 2004). There is therefore need for education. Students should be made aware of the fact that some of the sexual activity that is commonplace among their peers could have adverse health consequences. They are to note that having and engaging in sex with multiple partners are high-risk behaviours which go with potential health risks (Institute of Medicine, National Academy of Science, 1986). Yet even with a regular, known partner, the potential health risk of intercourse remains. Therefore, familiarity with a sexual partner should not be seen as accompanied by a perception of decreased risk.

It was discovered the 57% of the students had sex with multiple partners over a few weeks. The reasons behind this could be for romantic relationships, physical attraction, sex for financial (monetary) gain/needs, material comfort, gain/needs – clothes, food, household equipments, furniture, ..., out in order to be like friends or to outclass them (Peer pressure), with no thought as to how risky such behaviour is. Others get many men at a time through whom to get their different needs met. For many, having multiple partners is a desperate survival strategy (Ford and Koetsawang, 1991). Another category goes for multiple partners for the pleasure of it – sexual satisfaction or pleasure and variety. It also talks of low moral standards and little religious influence.

STD and HIV control should be core components of the HIV/AIDS campaigns, making obvious the link between the two by demonstrating the role played by STDs in HIV transmission by increasing the likelihood. Being aware of the consequences of AIDS but not of the role STDs play in HIV transmission, emphasis should be laid on the fact that STDs increase the likelihood of HIV transmission (Gerald, 1999). This may increase the concern of young people and lead to less risky behaviour. They should be made to see that the behaviours that put one at risk for STDs are the same as those that put one at risk for HIV infection (Eckholm, 1990) and therefore capitalize on knowledge about HIV to promote STD prevention efforts.

A key component of this control strategy would be to improve STD diagnosis and treatment. This is done most effectively through formal health services. The central issues underlying adolescents'

treatment decisions were cost, time, providers' lack of interpersonal skills, and confidentiality. Improving the quality of formal health care by targeting some of these concerns would increase the likelihood that young people will seek advice and treatment for STDs and HIV/AIDS. Training providers in sensitivity, confidentiality and other special needs of young people might increase attendance of youths at hospitals and clinics. Training providers in low-cost diagnosis and treatment techniques is a central component of increasing access for adolescents, who frequently lack money to pay for health care (Oxfam, 2002).

Youth-friendly services, which are very new and few in Cameroon, could provide a way of increasing access to them. With varying approaches, the services should emphasize low-cost or free treatment and staff trained to treat young people sensitively and according to their needs. Some non-governmental organizations could fill the gap by serving the youth through clinics specially tailored to adolescents' needs and through well-developed and backed school health clubs, coupled with programmes like reproductive health workshops. (Agha Sohail 2002)

Public education campaigns using electronic media (radio, TV, films) are very effective ways of transmitting information on sex and sex-related issues to young people (Reuben Granich and Jonathan, 2001). This is helped by the fact that many spend their leisure time listening to or watching these. Health education campaigns in public places, print media, schools and health seminars could also be useful. These programmes which would target young people's sexual and reproductive health cannot ignore the potential of parental involvement, which is a major issue.

Parents play an important role in the reproductive health of their children. This corroborates with Maccoby's findings which states that, parental involvement is significantly related to positive child outcomes (Maccoby, 2000). For this, they need to be well-versed and better informed than the children in order to become that ideal source of information. There is therefore a great need to improve parents' knowledge and their ability to communicate with their children about sexual and reproductive health, since it is agreed that few parents know more than their children about STDs, HIV/AIDS, condom use and other topics on sexuality. The possible negative influence that parents can have on their children in relating to such topics should not be overlooked. Detrimental parental behaviour should be looked into, such as in the matter of scolding children who ask questions on sexuality.

Educational programmes will certainly not have the same impact, effect and influence on the young adults. However, involving them in programme development and implementation is one way of increasing programme effectiveness, particularly when those resistant to change participate. Peer-based approaches are a common way of improving young people's sexual and reproductive health. Yet, their limited reach should not be overlooked. Using the language of youths to describe STDs and HIV/AIDS would make educational messages more meaningful, given that youths are usually more familiar with local and colloquial names than with their medical names.

Conclusion

The high risk behaviour practised by most university youths betrays their lack of knowledge about HIV/AIDS in spite of all that has been going on in the form of sex education and sensitisation. There is a big gap to be breached between knowledge and practice.

The survey provided insight into adolescent knowledge and attitude about sexuality and its consequences, including STDs and HIV. From these, several points emerge which should be integrated into educational programs designed to increase safer sex and more responsible behaviour among adolescents. Increasing the perception of the risks associated with some sexual and other activities, highlighting the connections between these things and HIV could be components of control programs in this setting.

To promote effective behaviour change, interventions should include the high innovative participation of young people and medical personnel, seeing the tendency to believe in the medical corps. Educational activities should target parents as well, for it would enable them to play a more beneficial role in the sexual and reproductive health of their children, seeing the bent they have for information from peers.

The alarming perception that people intentionally spread AIDS should be further explored and addressed under issues of stigma. Stigma should be addressed too because 30% would want to educate others if infected but certainly only after overcoming all the barriers faced by PLWHA.

The results of this survey improved our understanding of how adolescents become involved in sexual relationships at a young age and engage in risky behaviour even when they know the risks. Sexual behaviour and leisure activities which accentuate or promote the sexual relationship were identified. Financial and economic difficulties encountered obviously motivate a lot of these sexual relationships. Finding ways to encourage STD and HIV/AIDS prevention and treatment in settings where health care

resources and basic necessities are limited is a challenge that must be met. Focused action to increase STD and HIV awareness, knowledge, prevention and treatment by qualified personnel is critical in the control of HIV/ AIDS pandemic in Cameroon.

References

1. Agha S, A Quasi-experimental study to assess the impact of four Adolescent sexual Health interventions in sub-Saharan Africa. *International Family Planning Perspectives* 28: 67-70 and 113-118 <http://www.guttmacher.org/pubs/journals/2806702.pdf>
2. Cock KM, Weiss HA. The Global Epidemiology of HIV/AIDS. *Science*, 2000; March 22.
3. Eckholm, E. What Makes the 2 Sexes so Vulnerable to Epidemic. *African Action on AIDS*, 1990; p 20 -.
4. Ford and Koetsawang. *Rural Adolescent Sexuality and Determinants of Provincial Urban Premarital Adolescent Sex*, IPSR, 1991; 408.
5. Georges AJ. Georges – Courbot MC . *Epidemiology of HIV/AIDS Infections in Africa*. MEDLINE 1991; October 11, 40(23).
6. Gerald J.S. *AIDS UPDATE* . Prentice Hall, Upper Saddle River, New Jersey; p 1999; 149.
7. Institute of Medicine National Academy of Science. *Confronting AIDS*. National Academy Press, Washington, D.C. 1986; p 51.
8. Maccoby EE. Parenting and its effects on Children: On reaching and misreading behaviour genetics. *International Journal of Behavioural Development* 2000; 28(2), 148.
9. Marx J.L. A virus by any other name...*Science*, 1985; March 22.
10. Meekers D, Klein M and Foyet L. 2003. “ Patterns of HIV Risk Behaviour and Condom Use Among Youth in Yaounde and Douala, Cameroon” *Journal AIDS and Behaviour* 7 (4): 413-420.
11. OXFAM, Gender, Poverty and Intergenerational Vulnerability to HIV/AIDS. *Gender and Development* 2002; 10(3), p 68.
12. Temin MJ, Okonofua FE, Omorodiion FO, et al. Perceptions of sexual behavior and knowledge about sexually transmitted diseases among adolescents in Benin City, Nigeria. *Int Fam Plann Perspect* 1999; 25(4):186-90,195
13. UNAIDS/WHO. *A Fact Sheet for HIV/AIDS in Cameroon*. 2002;