

Knowledge, Attitude and Practice on Mode of Transmission of HIV/AIDS and Prevention among Youths in the North West Region of Cameroon

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Abstract

Introduction: This study was carried out using a multistage cross sectional study to evaluate the extent of knowledge on HIV/AIDS and its effects on youths in the North West Region of Cameroon.

Method: The study was carried out on 1,120 (690 females and 430 males) students aged 15-24 years who consented to participate in the study from April to June, 2014. A questionnaire to assess the knowledge of the study population on mode of HIV/AIDS transmission and use of condom for prevention was developed and pretested to 100 students in one of the non-participating schools. Statistical analysis was done using the SPSS version 20 statistical package.

Results: The majority of students (81%) were very knowledgeable about HIV/AIDS transmission and condom use as prevention methods (87%). Although the majority of students knew that the use of the condom can prevent HIV/AIDS transmission, 68.5% said that they will be embarrassed buying condoms. The study revealed that 51.7% had never been taught how to use the condom, while 72.7% had never used condoms. There was a good number (67.2%) who believed that promoting condom use is promoting sex.

Conclusion: The lack of knowledge on HIV prevention methods and the high level of misconception, pose a need to intensify the education programs on HIV/AIDS prevention methods.

Keywords: Cameroon; HIV/AIDS; Knowledge; Prevention; Youth

Introduction

The human immunodeficiency virus (HIV) is one of the most challenging threats to human wellbeing in sub-Saharan Africa (SSA) today. One sub-population at high risk of the infection is the youth [1]. Data from the 16th International AIDS Conference in 2006 suggest that nearly two-thirds of all people newly infected with HIV are between the ages of 15 and 24 and that about 6,000 young people contract HIV daily [2]. While the youth accounts for 45% of all new infection of HIV globally, almost 90% of this number is in SSA [2]. Knowledge is an important pre-requisite for HIV/AIDS prevention through behaviour change. Most national programmes have put a great deal of effort into the “information, education, communication” (IEC) campaigns, which aim at increasing knowledge about HIV, the behaviours that spread it and the ways it can be avoided. Many programmes have had a great deal of success in imparting this information. Indicators of knowledge are beginning to register high levels of correct knowledge. However, behind this knowledge often lurks misinformation or misconceptions, which influence the way people behave [3].

According to the Cameroon Demographic and Health Survey and Multiple Indicators Cluster Surveys (DHS-MICS) conducted by the “National Institute of Statistics” (NIS) [4], in collaboration with the

Ministry of Public Health in 2011 [5], 4.3% of adults age 15-49 are HIV-positive. Presently following the World Bank indicator survey [6], the percentage has increased from 4.3% to 5.4%. According to that survey, HIV prevalence is almost twice as high among women (5.6%) than men (2.9%), and among these women, 4.6% are living in urban areas compared with 6.4% in rural areas. HIV prevalence is highest in the South Region (7.2%), followed by the East Region (6.3%), and North West Region (6.3%). HIV prevalence is lowest in Extreme North Region (1.2%) and North Region (2.4%). Still in the survey, 2.1% of young people aged 15-24 are HIV-positive. Among young women, HIV prevalence is slightly higher in those living in urban areas (2.9%) than those living in rural areas (2.6%).

One’s perceived risk, based on one’s knowledge can lead to personal behaviour modification. This is the principle of the AIDS risk reduction model [7]. UNAIDS reports that about 40% of males and 36% of females in 64 countries have accurate and comprehensive knowledge of HIV/AIDS; However, this rate has fallen short of the intended target of 96%. UNAIDS also reveals that some national programs for HIV/AIDS prevention meant to provide comprehensive information are not effective resulting in many people in several countries who have not received much knowledge on the basic facts about HIV/AIDS [8]. Prata [9] in a study relating individual risk perceptions to the use of condoms in Mozambique reported a high level of knowledge about HIV transmission but knowledge about other

aspects of HIV/AIDS such as condom use and other prevention methods were lacking.

Adolescence and youth (ages 15 to 24) is the time when the majority of people become sexually active. Comprehensive knowledge of HIV-being able to correctly identify two ways to prevent sexual transmission of HIV, reject local misconceptions about HIV, and know that a healthy-looking person can transmit HIV, is increasing around the world. In countries with high prevalence, like Kenya and Haiti, less than half of all females ages 15 to 24 have sufficient knowledge of HIV. In Mali, less than one-quarter of all young men and young women have comprehensive knowledge. While young women face a higher risk of becoming infected with HIV, males are more likely than females to have comprehensive knowledge of HIV (United Nations Statistics Division, Millennium Development Goals Database).

The United States Agency for International Development [10] reports a median age of sexual debut of 16.4 years in Cameroon; while Kongnyuy et al. [11] in their study on sexual behaviours among adolescents in Cameroon, report that 20.8% of the respondents had more than one life time partner, and 17.2% had more than one sexual partner in the last twelve months prior to their study. It was also reported that young women in Urban Cameroon reported low ability to refuse sex in their relationships with men [12].

Sexual transmission of HIV can be prevented by using condoms during sexual relationships, assuming that they are used correctly and consistently [13,14]. The sexual and reproductive health behaviours of a large number of youths in Cameroon as in other SSA countries continue to raise serious concerns in view of the implication for the HIV/AIDS epidemic. Rwenge [15], in his study on Cameroon youths reports that more than 90% of his respondents mention that consistent condom use could prevent AIDS, but that despite such knowledge only 25% of them were using condoms. The WHO [16] reports that in Cameroon, 47% females and 57% males of the same age group reported using condoms at the previous high risk sexual encounter. This shows that there is a gap between perceptions and reality.

The aim of this study is to assess youths' knowledge, Attitude and practice on the mode of HIV/AIDS transmission and prevention in the North West Region of Cameroon.

Specific objectives of the study are to:

- Determine the percentage of youth aged 15-24 who have correct knowledge on the various modes of HIV transmission.
- Assess youths risky sexual behaviour
- Assess youths' misconception on HIV/AIDS with respect to condom use.

Methods

Study area and period

The study was conducted in among students in all the seven divisions of the North West Region of Cameroon. The divisions were; Boyo, Bui, Donga-Mantung, Menchum, Mezam, Momo and Nkongsamba division during the second term of 2014.

Study design

A multistage cross-sectional descriptive design was adopted to assess the knowledge of correct condom use and consistency of use

among secondary school learners in North West Region, Cameroon. A quantitative research method was employed [17].

Sampling

A stratified, simple random sample was selected for this study. Multistage sampling was used. The school attendance registers of the learners were used as the sampling frame to select a sample of 1,120 grades 10 to grade 12 (form five to upper sixth) students from twenty eight secondary schools in North West Region of Cameroon.

Data collection

A pretested self-administered questionnaire comprising items regarding socio-demographic characteristics and items relating to knowledge of correct condom use; and condom use was used to collect data.

Reliability and validity

The questionnaire was pretested to clarify instructions, relevancy, usability and completion time, to refine and introduce modifications where necessary and to ascertain reliability and validity. During the pre-test, 50 students, who did not participate in the actual study, completed the questionnaires. They required no assistance, understood the questions and needed approximately 15 minutes to complete the questionnaires, all in English language.

The reliability of the research instrument used for the study was tested using the coefficient alpha, and by pre-testing the questionnaires. The following types of validity were also established: face validity, content validity, construct validity and criterion-related validity. The questionnaires were distributed to 1,120 students in twenty-eight secondary schools in seven Divisions in the North West Region of Cameroon during normal class periods with the permission of the principals and the co-operation of the teachers concerned.

Data analysis

Data was analysed using SPSS version 20 software program. Data was summarized by means of descriptive statistics including the frequency table. More advanced statistics included the chi square test at the 0.05 significant levels.

Ethical approval

Restricted access to the information collected and coding of the questionnaire was strictly observed. Approval was sought from the University of Buea, Faculty of Health Science Institutional Review Board, for Scientific and Ethical issues. Research authorization was given by the regional delegate of Public Health of the North West Region. Informed consent was obtained and signed by subjects; meanwhile assent was sought from parents of those subjects below 20 years of age. To maintain privacy during the data collection phase, participants were not expected to disclose their identity or write their names on the questionnaire.

Results

Characteristics of the study population

Ages were categorized into two groups namely; adolescents (15-19) and adults (20-24). The age distribution of respondents was similar

with 81.9% being those 15-19 years and 82.3% for those aged 20-24 years.

Respondent's knowledge on HIV/AIDS carrier state

The percentage of respondents who knew that a healthy looking person could have HIV. Table 1 shows that 83.5% and 79.4% of females and males respectively correctly knew that a healthy looking person could be HIV positive. There was no statistical difference ($P>0.5$) between knowledge in older versus younger youths.

The findings of the present study indicate a gender difference with males having more knowledge on HIV/AIDS transmission than the females ($P=0.002$). As concerns knowledge on the existence of HIV carrier, sex was not found to impact knowledge ($P=0.145$).

Variable	True (%)	False (%)	Don't Know (%)	P-values (%)
Sex				
Female	83.5	15.9	0.6	
Male	79.4	18.2	2.3	0.145
Age Group				
15-19	81.8	17.1	1	
20-24	82.3	15.2	2.5	0.509

Table 1: Responses on knowledge of carrier state by sex and age group.

The responses on knowledge of carrier state by division are represented in Figure 1 below. The level of knowledge was $>50\%$ in all divisions. There was no significant difference in knowledge between division ($P=0.509$).

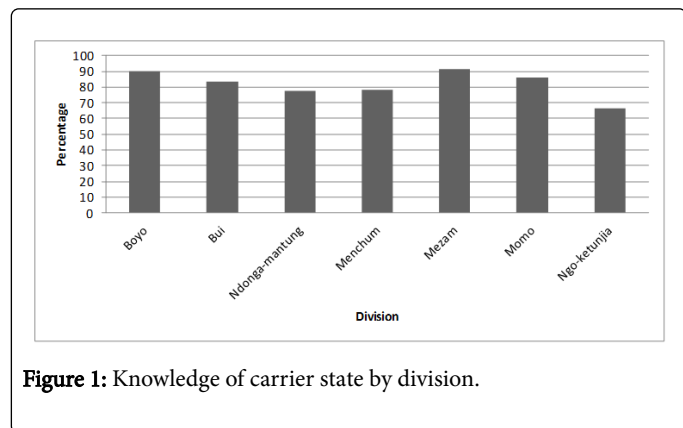


Figure 1: Knowledge of carrier state by division.

Assessment of risky sexual behaviour

Figure 2 shows a comparison between respondent's sexual life and condom use. The result shows that some respondents were more likely not to use condoms than the other ($P=0.001$). Mezam division had the highest percentage of youths who have had sex (48.8%) as well as the highest number who have used condom (37.7%).

For each of the division, those who had sex were more than those who used condoms. The difference was statistically significant

($P=0.001$). The practice of having sex and not using condoms was highest in Ndonga-Mantung and Boyo divisions.

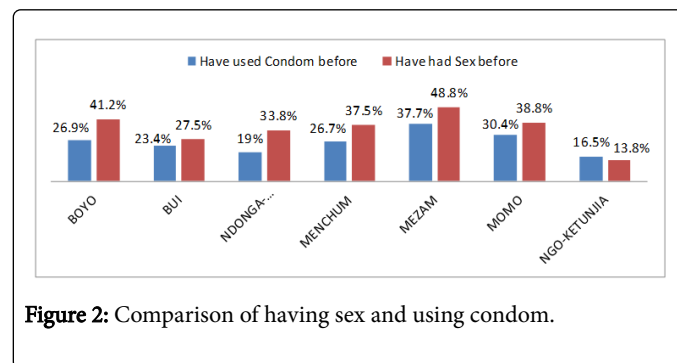


Figure 2: Comparison of having sex and using condom.

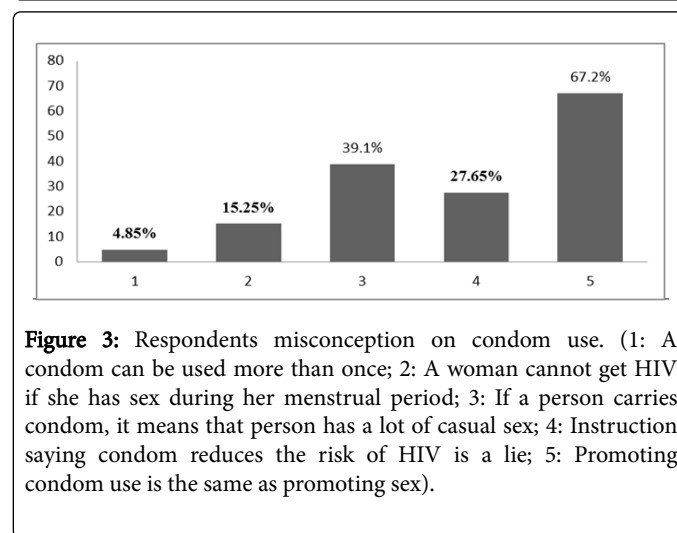


Figure 3: Respondents misconception on condom use. (1: A condom can be used more than once; 2: A woman cannot get HIV if she has sex during her menstrual period; 3: If a person carries condom, it means that person has a lot of casual sex; 4: Instruction saying condom reduces the risk of HIV is a lie; 5: Promoting condom use is the same as promoting sex).

Background Characteristics	Females (n=690)	Males (n=430)	Both sexes
AGE GROUP			
15-19	88.4	81.9	85.2
20-24	11.6	18.1	14.9
DIVISION			
Boyo	12.5	17.2	14.9
Bui	16.2	11.2	13.7
Ndonga-Mantung	13.9	14.9	14.4
Menchum	15.4	12.6	14
Mezam	10.1	20.9	15.5
Momo	15.4	12.6	14
Ngo-Ketunjia	16.5	10.7	13.6

Table 2A: Percentage distribution of respondents according to age group and division.

Variable	Female (%)	Male (%)	All	Age Group	
				15-19	20-24
A person with HIV can look and feel healthy	83.5	79.4	81.45	81.8	82.3
A woman can get HIV if she has anal sex with a man with HIV	41.1	47.9	44.5	43.5	45.5
A woman can get HIV if she has vagina sex with a man who has HIV	85.7	90.6	88.15	87.8	87.3
Having sex with more than one partner can increase a person's chance of being infected with HIV	78.2	75.1	76.65	75.6	85.7
People are likely to get HIV by deep kissing, putting their tongue in their partner's mouth, if their partner has HIV	43.7	44.9	44.3	43.1	51.3
Pulling out the penis before a man's climax keeps a woman from getting HIV during sex	17.9	21.6	19.75	12.6	19.7

Table 2B: Respondents with correct knowledge of HIV/AIDS transmission.

Variable	Responses	Female (%)	Male (%)	Age Group	
				15-19	20-24
A condom can be used more than once	Yes	5	4.7	5.2	2.7
	No	80.7	91.5	83.3	94.7
	Don't know	14.3	3.8	11.5	2.7
A woman cannot get HIV if she has sex during her menstrual period	Yes	12.7	17.8	14.7	14.5
	No	54	58.7	55.5	57.9
	Don't know	33.2	23.5	29.8	27.6
If a person carries condom, it means that person has a lot of casual sex	Yes	40.1	38.1	39	41.3
	No	34.6	43.8	36.5	48
	Don't know	25.3	18.1	24.4	10.7
Instruction saying condom reduces the risk of HIV is a lie	Yes	31.7	23.6	29.2	25
	No	51.7	67.9	56.9	64.5
	Don't know	16.6	8.5	14	10.5
Promoting condom use is the same as promoting sex	Yes	69	65.4	66.9	72
	No	17.1	25.6	20.2	21.3
	Don't know	13.9	9	12.8	6.7

Table 2C: Respondent's misconception on condom use by sex and age groups.

Misconception on condom use

In order to understand the level of misconception on HIV and condom use, five statements were chosen as criteria for evaluation (Figure 3).

These statements were analysed and stratified in terms of sex as well as age groups. There was no significant difference in the level of misconception between male and female students as well as between age groups ($P=0.145$) (Tables 2A-2C).

Discussion

Knowledge about the female condom was highly deficient because none of the respondents had ever seen one, let alone used them. Women and young girls lack power over their bodies, and their sexual lives, social and economic inequalities increase their vulnerability to contracting and living with HIV/AIDS.

Knowledge that the male condoms can prevent HIV if correctly and consistently used was high. However, the majority of respondents had not been taught on how to correctly use the male condom. This is supported by a study carried out in by Tarkang [18] among high school

females, on Knowledge of correct and consistent condom use in 2013, which showed that only 27.4% reported to have used condom consistently. While 58.3% of males reported having been taught to use the condom, only 38.3% of females were aware of proper use of the condom and this difference was highly significant ($P=0.001$).

The low knowledge of correct condom use by school students as reported in this study is in agreement with the report of the study by Prata et al. [9], among first year university students in Mozambique. Most of them did not know that once a condom is used, it cannot be reused; that a new condom should be used each time a couple has sex and it must be used from start to finish in order to prevent pregnancy and HIV/AIDS. Some did not even know that the condom does expire or that wrong usage of condom can reduce its effectiveness in preventing HIV/AIDS transmission during sexual intercourse. Knowing how to correctly use condoms and using them consistently during sex are among the major actions necessary for the prevention of sexual transmission of HIV.

The finding that 29% and 67.1% of those 15-19 and 20-24 years respectively reported to have had sexual intercourse before, indicating that 7% of adolescents and 23.1% of young adults had unprotected sex was worrisome. Young adults therefore practiced risky sexual behaviour more when compared with adolescents. A possible explanation is that they are more adventurous tending to engage in more casual and experimental sex. This is supported in a similar study carried out in Northern Uganda by Diana [19] on condom use, where only 40% of youths reported to have used condom in the last 12 month.

Generally, the low level of the use of condom may also be due to the fact that youths feel embarrassed buying condoms.

Conclusion

High-risk sexual behaviour was indicated across the divisions of the North West region and notably in Boyo and Ndonga-mantung divisions. Such information should be exploited by the Ministry of Health and these areas targeted for proper education on HIV/AIDS transmission. There is a dire need to educate the youth on correct condom usage in the North West Region and Cameroon at large. Interventions designed to enhance beliefs, perceptions and skills related to condom use could be expected to reduce the number of unprotected sexual encounters among sexually active adolescents. It is also important to recognise the fact that the religious beliefs of individuals prevent the use of condom and in such cases, education on the practice of abstinence is vital to prevent HIV/AIDS transmission.

Recommendations

The following recommendations were made from the study. The Ministry of Secondary Education should incorporate sex education into the secondary school curriculum. Principal of schools should encourage parents during PTA meetings to discuss matters of HIV

transmission and prevention with their children. Mass media campaigns to promote abstinence, delaying sexual debut and consistent condom use should be intensified nationwide in order to educate youths on adopting healthy sexual behaviour.

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