

# Sexual Knowledge, Attitudes and Behaviors Related to Sexually Transmitted Infections in Vocational Training Institutions of the University of Parakou in 2018

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### Abstract

*Introduction:* Sexually transmitted infections (STIs) are a global public health problem. The objective of this study was to assess the knowledge, attitudes and sexual behaviors related to STIs of students at the University of Parakou (Benin) in 2018.

**Methods:** this was a cross-sectional study with descriptive and analytical purposes. The study population consisted of students from the professional institutions of the University of Parakou. The data were analyzed with the Stata version 11 software.

**Results:** A total of 660 students were surveyed. The average age was  $21.47 \pm 2.90$  years. The predominant age range was 20 to 23 years and the sex ratio was 1.63. All students had heard of STIs and the most cited was HIV/AIDS; 6.67% had reported having contracted an STI once. The main sources of information were school (75.75% and television (72.58%). The main route of transmission cited was sexual (97.88%). Among the students 61.51% were sexually active with 25.62% having had more than 2 sexual partners in the last 12 months and 16.50% had never used a condom.

**Conclusion:** The students surveyed at the University of Parakou have a good knowledge of STIs but their sexual attitudes and behaviors still need to be improved, hence the need to intensify awareness.

Keywords: STI/HIV, Knowledge-Attitudes-Sexual Behaviors, Students, Parakou.

#### **INTRODUCTION**

Sexually transmitted infections (STIs) are a global public health problem due to their increasing prevalence, especially among adolescents and young adults [1]. Young people are particularly vulnerable to STIs because of their risky sexual behaviors [2], their lack of access to information, and their insufficient knowledge of prevention methods. Behavior Change Communication campaigns have been initiated in order to provide the right information to the population; however, despite these campaigns, the problem of STIs remains real among this young segment of the population. In order to assess the situation in the student environment, this research was conducted. Its objective was to study the knowledge, attitudes and sexual behaviors related to STIs of students in vocational training institutions of the University of Parakou.

#### **PATIENTS AND METHODS**

The present study took place at the University of Parakou, the 2nd public university in Benin, located in the North, in the Commune of Parakou, the 3rd city with special status in Benin, in the Department of Borgou. It was a descriptive cross-sectional study with analytical purpose with prospective data collection; conducted

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through a survey from May 28 to June 22, 2018 among students of vocational training institutions of the University of Parakou. These were the students of:

- The Faculty of Agronomy (FA)
- the Faculty of Medicine (FM)

- the National Training School for Senior Technicians in Public Health and Epidemiological Surveillance (ENATSE)

- the Institute for Training in Nursing and Obstetrical Care (IFSIO)

- the University Institute of Technology (IUT)

- the National School of Statistics, Planning and Demography (ENSPD).

All students were included in the study:

- Enrolled for the current academic year in the professional training institutions of the University of Parakou

- Having given their informed consent to participate in the study.

The sample was obtained by using a stratified random sampling technique. The stratification variable was the professional training entity. For this purpose, each professional entity (Medicine, ENATSE, IUT, Agronomy, IFSIO and ENSPD) of the University of Parakou was considered as a stratum and then the sample was distributed in proportion to the number of students in each stratum. The sample to be taken by stratum was in turn distributed in proportion to the number of students in each class. In each class, two streams of training were randomly selected. To do this, the different streams in each class were assigned a number; the numbers were written on slips of paper and put in a jar and then a draw was made to select the two streams to be included. In schools where the graduating class was made up of only one stream, that stream was systematically included in the study. The number of students drawn from each selected stream was proportional to the enrollment in that stream. Then, in each selected stream, students were selected by simple random sampling. Each student was assigned a number and then a draw was made to select the students to be included in the study. The minimum sample size n was calculated using the SCHWATZ formula. Data were collected using a selfadministered questionnaire. The variables studied were socio-demographic and academic characteristics, knowledge about STIs, sexual behaviors, and students' attitudes toward voluntary STI testing. Data entry was done using Microsoft Word 2013, Excel 2013 software. Data were entered using Epi Data 3.1.software and analyzed with Stata version 11 software.

#### RESULTS

The average age of the 660 students surveyed was 21.47 ± 2.90 years. The predominant age range was 20 to 23 years (52.27%). The predominance was male with a sex ratio of 1.63. All students had heard of STIs at least once and the most cited were HIV/ AIDS (97.88%), gonorrhea (71.97%) and syphilis (55.30%). The main sources of information cited by the respondents were school (75.76%) followed by television (72.58%) and health workers (59.70%); parents were the least cited source. The main signs cited were itching on the sex (71.52%), the presence of sores/ pimples (72.12%) and urethral discharge and vaginal discharge (51.06%). The three main routes of STI transmission (Table I) most cited were sexual (97.88%), blood (90.15%), and mother-tochild transmission (80.30%). Among the 660 students surveyed, 6.67% had reported having contracted an STI once before. The facilities used for STI treatment cited by the students were health centers (n=618; or 98.88%), pharmacies (n=105; or 16.80%) and traditional therapists (n=103; or 16.48%). Among the respondents, 96.97% had already heard of the hepatitis B test; among them, 53.28% said they had done it with their consent; the same was true for the HIV test, where 99.24% were aware of the test and 61.98% said they had done it with their consent. Of all the students surveyed, 406 were sexually active, and among them, 61.82% declared having had only one sexual partner in the last twelve months and 25.62% had had more than two sexual partners. It should also be noted that 85.72% of students practiced vaginal intercourse. Among the sexually active respondents, condoms were not used by all (Table II) or in the same way. Among them, 47.49% had used a condom at first intercourse and 16.50% had never used a condom.

### DISCUSSION

The average age of the students was  $21.47 \pm 2.90$  years and the predominant age range was 20 to 23 years, it is close to that found in 2011 in Marrakech by Khalil

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[3]. This proves that the university environment is made up of young people and therefore vulnerable to STIs. The main sources of information on STIs cited by the respondents were school, television and health workers. These main sources were also found by Ekouya Bowassa et al in Brazzaville in 2011 [4]. On the other hand, Okonta et al [5] in Lagos and Sangho et al [6] in Bamako found the media to be the primary source of information. These different findings underline the importance of the media in informing young people about STIs. On the other hand, in our study, parents were the source of information least cited by students, as in the study by Cissoko Y et al, in Mali in 2008 [7]. This could be explained by the socio-cultural context of West Africa which makes discussions about sexuality a taboo subject and therefore not much discussed between parents and young people. The main route of STI transmission cited was sexual (97.88%). The same observation was made by Oyo-Ita et al [8] in Nigeria (90%). Some students had a wrong knowledge about

the transmission routes of STIs; and thought that they could be transmitted by sweat (21.52%), mosquito bites (10.00%). Outliers were also found by Oyo-Ita et al. in Nigeria [8] where respondents stated that STIs could be transmitted through mosquito bites (11.80%), witchcraft (10.03%) and sweat (17.10%). Twenty-five point sixty-two percent (25.62%) of sexually active respondents had more than 2 sexual partners, this result is lower than that obtained by kangah [9] in 2014 in Abidjan. The majority of our respondents practiced sex by vaginal penetration while in Stockholm, Sweden in 2014, Stenhammar [10] reported rather a sexual practice by anal penetration among students. Of the 406 sexually active respondents, 83.50% had reported using condoms during sex. Of these, 51.33% used condoms occasionally, 48.67% used them regularly, and 16.50% had never used them. This nonsystematic use of condoms among students during sexual intercourse was also reported by Ekouya Bowassa et al in Brazzaville in 2011 [4].

**Table I.** Distribution of students surveyed at UP in 2018 by known routes of STI transmission (n=660)

	Number	Percentage %
Sexual route	646	97.88
Blood route	595	90.15
Mother-to-child transmission	530	80.30
Sweat	142	21.52
Mosquito bites	66	10.00
Saliva	7	1.06
Soiled objects	5	0.76

**Table II:** Distribution of sexually active students at UP vocational schools by condom use.

	Number	Percentage %
Condom use during regular sex		
Yes	339	83.50
No	67	16.50
Condom use at first sex (n=339)		
Yes	161	47.49
No	178	52.51
Frequency of condom use (n=339)		
For all sex	165	48.67
Occasionally	174	51.33

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### **CONCLUSION**

The students surveyed in the UP vocational training institutions have a good knowledge of STIs. But despite being well informed, these students have sexual behaviors that put them at risk of STIs such as multiple sexual partnerships, not systematically wearing a condom during sexual intercourse.

## REFERENCES

- Sultan S. Epidemiology of sexually transmitted infections. Colon Rectum.25 Mar 2014; 8(2):84-7.
- Segbedji K, Djadou KE, Tchagbele O-B, Azoumah KD, Géraldo A, Agbeko F, and al. Sexual health of college adolescents: knowledge, attitudes, and practices regarding the risks of sexually transmitted infections in northeastern Lomé. Rev. CAMES SANTE Vol.4, N° 2, December 2016; 85-9
- Khalil I. Attitudes and knowledge of students regarding Sexually Transmitted Infections/ AIDS, [Medical Thesis]. Marrakech: CADI AYYAD University- Faculty of Medicine and Pharmacy; 2011. 126p.
- Ekouya Bowassa G, Okoko AR, Moyen E, Motoula-Latou D, Oko APG, Kambourou J, and al. Knowledge, attitudes, and practices of school youth regarding HIV/AIDS in Brazzaville. Rev. CAMES SANTE Vol.3, N° 2, December 2015; 85-8.

- Okonta PI, Oseji MI. Relationship between knowledge of HIV/AIDS and sexual behavior among in school-adolescents in Delta state, Nigeria. Nigerian Journal of Clinical Practice. 2006; 9(1): 37-9.
- Sangho H, Keita AS, Kondé A, Coulibaly C, Kéita HD, Guindo MT, and al. Knowledge, attitudes and practices on STIs and HIV/AIDS among high school girls in Bamako. Mali médical. 2012; 27(3): 11-6.
- Cissoko Y, Traoré A, Sidibé LN, Maiga Y, Coulibaly M, Maiga Z, and al. Knowledge, attitudes, and practices about STIs/HIV/AIDS among high school students in Gao (North Mali). Revue Malienne d'Infectiologie et de Microbiologie 2014, Tome 4; 12-20
- 8. Oyo-Ita AE, Ikpeme BM, Etokidem AJ, Offor JB, Okokon EO, Etuk SJ. Knowledge of HIV/AIDS among secondary school adolescents in Calabar-Nigeria. Annals of African Medicine. 2005; 4(1): 2-6.
- 9. Kangah OM. The problem of persistent sexual risk behaviors in the face of HIV/AIDS among students at the University of Félix Houphouët-Boigny. Eur Sci J. 2016; 12(11):438-50.
- Stenhammar C, Ehrsson YT, Akerud H, Larsson M, Tyden T. Sexual and contraceptive behavior among female university students in Sweden repeated surveys over a 25-year period. ACTA Obstet Gynecol. 2015;94:253-9.

**Citation:** Agbessi N, Akpadjan F et al. Sexual Knowledge, Attitudes and Behaviors Related to Sexually Transmitted Infections in Vocational Training Institutions of the University of Parakou in 2018. Archives of Dermatology and Skin Care. 2021; 4(1): 05-08. https://doi.org/10.22259/2638-4914.0401002

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