

## Knowledge, Attitudes and Behavior of Adolescents Against HIV/AIDS and STIs in Casablanca

Badî H<sup>1\*</sup>

Chakib A<sup>1</sup>

Bensghir R<sup>1</sup>

Marih L<sup>1</sup>

Ouladlahsen A<sup>1</sup>

Sodqi M<sup>1</sup>

Marhoum El Filali K<sup>1</sup>

<sup>1</sup>Department of Infectious Diseases, The Ibn Rochd university hospital, Casablanca, Morocco.

### Abstract

**Introduction:** HIV affects mostly young adults between 15 and 24 years of age. The appropriate management can't be designed without a better grasp of their needs. This work intends to study the knowledge, the attitudes and the sexual behavior of teenagers on a sample of students.

**Methods:** This is a cross-sectional and a descriptive study led between the first of November and the tenth of December of 2015 among 300 seniors in a high-school of Casablanca. The data were collected with a questionnaire filled by students.

**Results:** The participants were mostly male (59%). The average age was 17, 9 years of age (14-21 years old). Almost all teenagers (92, 3%) have heard before of the HIV infection. The main sources of information were television (97, 4%), internet (95%), and radio (76, 8%). The condom was the protection quoted the most (84%). However, despite their awareness, teenagers have a high risk sexual behavior, because a 122 (40, 6%) have already had a sexual intercourse, among of whom 43, 7% at least with two sexual partners in the last twelve months, and with no protection for 88 ones of them (71, 8%). The youngest age for the first sexual act was 13.

**Conclusion:** Despite all efforts made to fight the HIV infection, the risky sexual behavior remains high among teenagers. An adapted plan of action to this age group must be developed to inform and educate them, without forgetting to implement a follow up and a regular evaluation.

**Key words:** Knowledge, Attitude, Behavior, Teenager, HIV/AIDS, STIs.

### Introduction

Among all widespread diseases in the world, HIV infection and AIDS is one of the most feared during this century [1]. In the most affected countries, HIV has reduced the life expectancy of more than 20 years, slowed the economic growth and aggravated the poverty of households. Today, Africa holds the record of the pace of the spread of HIV and AIDS in the world. Its pace of progress gives the impression of making a race always more rapid especially among the youth category. It is this which is at the origin of the special attention paid by the researchers to the sexual behaviors of young people, because before the spread of the epidemic, there was very little written on the subject. Today, the statistics rely on thousands of young Africans affected by the disease. Suddenly, the sexuality has become a subject of major public health concern with the recognized extension of AIDS in recent years.

### Article Information

**Article Type:** Research

**Article Number:** JPI105

**Received Date:** 08 April, 2018

**Accepted Date:** 16 April, 2018

**Published Date:** 23 April, 2018

**\*Corresponding author:** Dr. Hanane Badî, Department of Infectious Diseases, The Ibn Rochd university hospital, Casablanca, Morocco. Tel: +212690005425; Email: [badi.hanane09\(at\)gmail.com](mailto:badi.hanane09(at)gmail.com)

**Citation:** Badî H, Chakib A, Bensghir R, Marih L, Ouladlahsen A, et al. (2018) Knowledge, Attitudes and Behavior of Adolescents Against HIV/AIDS and STIs in Casablanca. J Pediat Infants Vol: 1, Issu: 1 (18-21).

**Copyright:** © 2018 Badî H et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

In Morocco, in the fight against Sexually Transmitted Infections (STIs), HIV and AIDS awareness campaigns have contributed significantly to the improvement of knowledge about this subject even though it doesn't reflect on their behaviors; the education system has a major role in this, considering the importance of this group of the population on the one hand and the delays of the response in this sector on the other hand. However, no evaluation of the actions of this program has been conducted to this day in order to adapt the education and prevention programs to the changes of behaviors of the young population. Different studies are interested to the behaviors and knowledge of adolescents on STIs and sexuality in general [2-4]. Thus, showing that people from 15 to 24 years seems to be the most at risk of developing some STIs.

Furthermore, and in a desire to contribute to the many concerns of the authorities as well as officials in social and medical domains, we propose to conduct a survey the young testing their knowledge, their attitudes and practices in the field of STIs and HIV/AIDS in the urban commune of grand Casablanca.

### Aims of the study

1. Assess the knowledge, attitudes and practices on the STIs/HIV/AIDS.
2. Define the behavioral indicators of this group.
3. Define the modalities of access to prevention services among the selected sample of young high school students.
4. Guide new plans of action for the prevention of STIs/HIV according to the results among these young people.

### Material and Method

It is a cross-sectional study by an anonymous self-administered questionnaire filled by the investigator at the Prince Moulay Abdellah high school between November the first and December the 10th 2015. We included senior students, in science branch (the science of life and earth, physics, chemistry and Mathematics), present on the day of the survey and volunteering to participate.

After having explained the interest of the study, then the different parts of the questionnaire, the first part of which gathered information about the demographic aspects, access to information and the sexual behavior and in the second part the questions focused on knowledge of STIs and AIDS. Have been excluded all questionnaires not filled, incompletely filled or torn.

The descriptive analysis of the questionnaires has been made on Excel. The description and assessment of the level of knowledge among adolescents have been made according to the total number of good answers.

### Results

In total, 300 students have formed our study sample, the socio-demographic characteristics of our sample indicate a male predominance (59%). The average age of students answering the questionnaire was 17.9 years (16-21 years). All the students were single (100%), and all living in the urban commune of Casablanca. Table 1.

Almost all these teenagers (92.3%) had already heard of HIV and AIDS, and nearly half of them (46%) knew the other STIs, syphilis was cited 40%, the urethritis 35% and viral hepatitis B 10% of the times Figure 1.

More than 90% of the interviewed stated that the HIV infection is a viral disease, contagious, serious and fatal and 85% of them thought that it is a common disease. The main sources of information for these students are: the school (98%), television (97.4%), the Internet (95%), and the radio (76.8%).

#### The most listed ways of transmission of HIV were:

- The sexual transmission, during unprotected intercourse in 97%.
- The bloodstream, through the blood of an infected person in 79%, blood transfusion in 68%, the consumption of intravenous drugs in 67% and the use of contaminated instruments in 56%.
- Finally, the mother-to-child transmission has been cited in 66% and breastfeeding in 30% Figure 2.

The means of protection named by students are: the use of the Condom in 84%, abstinence in 74% and the partner's loyalty in 59%, while 33% thought that a vaccine exist Figure 3.

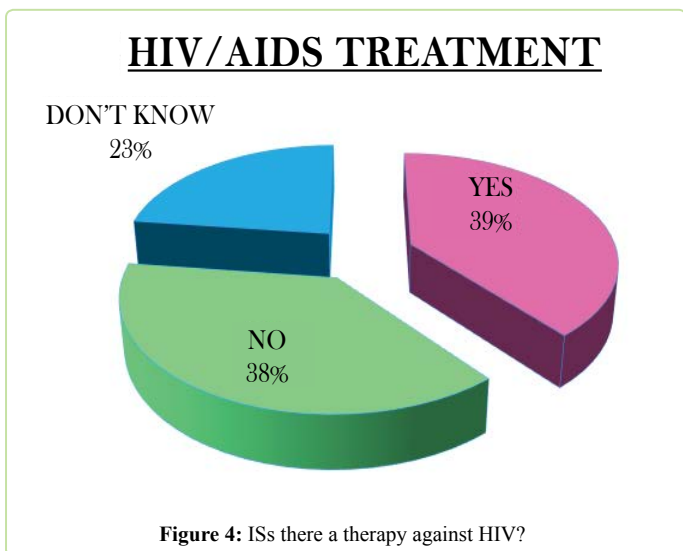
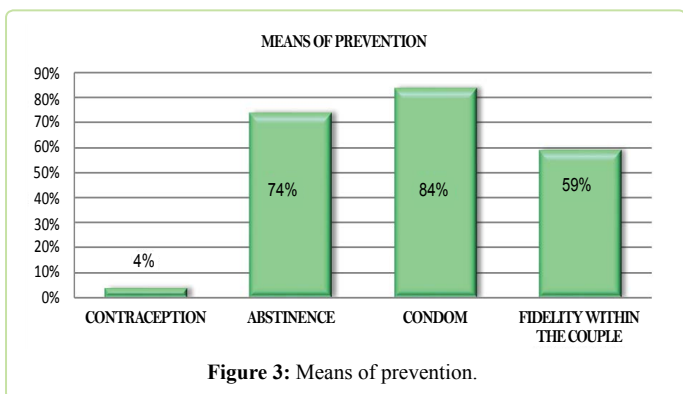
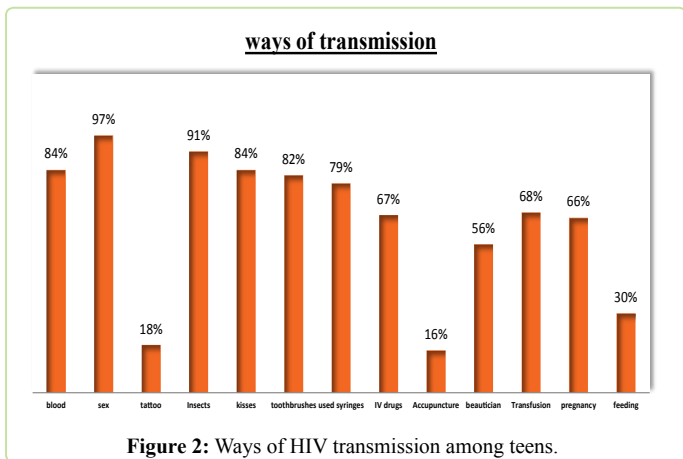
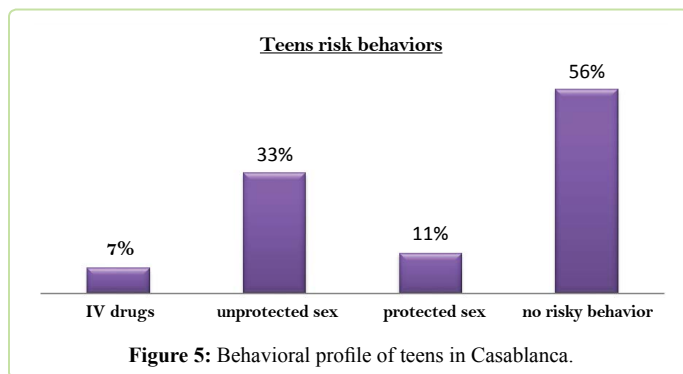
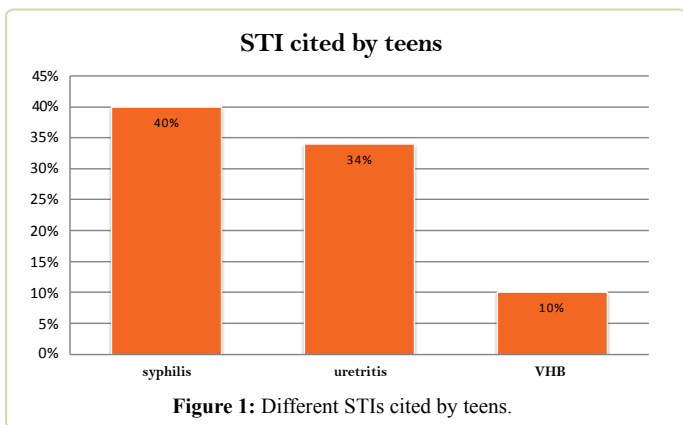
only 39% of students knew that a treatment against HIV is available, 52% of whom knew that it would protect the patient from opportunistic infections, 45% of them figured that it would decrease the viral load, while 11% of them thought that it was a curative treatment. Figure 4.

Forty-four per cent of the students have already had a sexual intercourse, 21% of whom had more than two sexual partners, 26% with two partners and 53% with only one in the past 12 months; most of these sexual relations were vaginal, 82%, oral in 68% and 50% were anal.

Only 25% of sexually active students reported having used a condom during the last sexual intercourse. The average age during the first sexual intercourse is 15.5 years, the youngest ever reporting was 12 years old. 74% of sexually active adolescents were between 15 and 17 years of age at first sexual intercourse. However, 7% of the participants in this survey say they have already consumed intravenous drugs Figure 5.

**Table 1:** Socio-demographic data of our study population.

| Number | Age (year)     | Sex Ratio H/F | School level                    | Professional status of parents | Origin |
|--------|----------------|---------------|---------------------------------|--------------------------------|--------|
| 300    | 17.9 [16 – 21] | 1.4           | Final year of the baccalaureate | 71%, one of the parents works  | Urban  |



## Discussion

Our study was designed to investigate the knowledge, attitudes and practices of young high school students regarding STIs and HIV/AIDS. The majority of student's responders were male (59%) with an average age of 17.9 years. The general knowledge of students surveyed on STIs AND HIV/AIDS was good, particularly concerning ways of transmission and the various means of prevention, showing the preponderant role of school education and the media (television, the Internet) as sources of information.

However, they are so many wrong ideas surrounding STIs and HIV/AIDS, concerning mainly ways of transmission, since 91% of the interviewed think that HIV is transmissible by insects and in 84% of the cases by kisses, but acupuncture and tattooing were named only in 16% and 18% respectively. These misinformation's concern means of prevention as well, seeing as how the third of high school students participating in the study affirm the existence of a vaccine.

We should however consider the differences in term of the knowledge acquired between HIV/AIDS and STIS. In fact, in our study, if the majority (92%) had good knowledge on the topic of HIV/AIDS, 46% of adolescents only had sufficient information about STIS. This discrepancy was also observed in a meta-analysis of 15 European studies [5]. This is probably related to the impact of the ads and campaigns promoting prevention and focusing essentially on this lethal infection [6].

Nearly half of the students (44%) of our sample have already had sex and the average age during the first sexual intercourse was 15.5 years. These results are comparable to those of the studies carried out in Algeria and France [5-6]. Similarly, the various studies conducted in Africa have noted the occurrence of first sexual intercourse at an early age during adolescence [7-9], the multiplicity of sexual partners and the irregular use of condoms among young people [10-12]. As a matter of fact, although 25% of sexually active students reported having used a condom during the last sexual intercourse, its use remains irregular.

Sexual risk behaviors, the insufficiency of information in the field of sexuality and the low use of reproductive health services increase the vulnerability of adolescents, exposing them to the consequences of increasingly early and poorly controlled sexual acts (STIs including HIV/AIDS, early pregnancies, clandestine abortion, school dropouts) [13,14]. The knowledge of ways of transmission and means of

prevention does not always translate into behaviors. Thus, despite the efforts of awareness, the risk of contamination by the HIV virus still did not sufficiently prompt the adoption of healthy sexual behavior in the school environment.

Adolescents constitute therefore a population at risk: they begin their sexual life poorly informed and not aware of the prevalence of these diseases, risks of transmission, the possibility of co-infections, with no knowledge of the concept of primary prevention and finally of the existence or nonexistence of effective therapeutics. Being first concerned by the risk of STIs [6,15,16], adolescents and young adults should be the primary target for education and information on sexuality. Yet, despite multiple campaigns of information, prevention and education, almost half of the surveyed adolescents in our study had unsafe sexual practices. This raises the question of the accessibility, the visibility and the adequacy of these tools of education among this age category.

## Conclusion

Through this study, we have been able to shine the light on the flaws in the knowledge of the young high school students of Casablanca, as well as their behavioral profile facing STIs and HIV/AIDS.

Like the similar studies conducted in different African and European countries, the results of our study show that despite their knowledge, the young students continue to engage in high-risk behaviors, this could be in relation with a default of perception, persuasion or effectiveness of the methods used to inform them and of the health education system, imposing a particular attention to the development and adaptation of programs of education and raising the awareness of young people as well as the evaluation of these programs in order to change the course of the epidemic.

## References

1. F. Toudeft (2010) Study on Knowledge, Attitudes and Behavior of Young Academics on HIV / AIDS: Evaluation of Community Actions. Study report. AIDS-ALGERIE.
2. Student Health: Prevention and Education Program. Circular n° 2003-210 of December 01, 2003, OO n° 46 of December 11, 2003.
3. Tanner AE, Hansel DJ, Fortenberry JD (2010) A prospective study of the sexual, emotional and behavioral correlates associated with young women's first and usual coital events. *J Adolesc Health*. 47: 20-25.
4. Greenery F, Rouquette A, Delori M, Aspeepe F, Fanello S (2010) Adolescents' knowledge, needs and expectations in sexual and emotional education. Study conducted among adolescents of the third class. *Arch Pediatr*. 17: 219-225.
5. Samkange-Zeeb FN, Spallek L, Zeeb H (2011) Awareness and knowledge of sexually transmitted diseases (STDs) among school-going adolescents in Europe: a systematic review of published literature ». *BMC Public Health*. 11:727.
6. Grondin C, Duron S, Robin F, Verret C, Imbert P (2013) Adolescents' knowledge and attitudes about sexuality, sexually transmitted infections and vaccination against human papillomavirus: results of cross-sectional survey in a high school. *Arch Pediatr*. 20: 845-852.
7. Niang NA (2007) Sexuality in schools in Dakar: behaviors, knowledge and perceptions related to HIV and AIDS, [<https://www.memoireonline.com/06/09/2203/La-sexualite-en-milieu-scolaire-dakar-0is-comportements-connaissances-et-perceptions-lies-au-VIH.html>]
8. Knowledge, Attitudes and Practices related to HIV / AIDS among 15-24 young people in Togo, study report, Lomé, URD, 25p. Edition, ED SMIV 2006
9. Integrated STI Prevalence and Behavior Survey (ISBS) conducted in Mali from April to June 2009: Final Report 2010.
10. Diarra S, Toumanion B, Doumbia L, Giani S, Kounta CH (2009) Impact of knowledge of HIV and AIDS on the sexual behavior in students in two schools of Sikasso. UNESCO.
11. Michel Sidibé (2013) Report on the Global AIDS Epidemic 2011-Status of the Global HIV Epidemic through the 2011 Country Reports. ONUSIDA.
12. Influence of HIV and sexual health education on young people's sexual behavior ", updated report, Geneva, 1997. ONUSIDA.
13. UNICEF-ONUSIDA-OMS: Young people and HIV / AIDS, a solution to the crisis, Copyright UNICEF in 2002.
14. Kounta CH (2012) Study of knowledge, attitudes and practices of young high school students in STIs of HIV and AIDS in the urban district of SIKASSO, 3rd region of MALI. Online Memory.
15. Moreau C, Lydié N, Warszawski J, Bajos N (2005) Sexual activity, STI, contraception: a stabilized situation. In: Health Barometer-Attitudes and Health Behaviors. Saint-Denis: INPES. 320-353.
16. La Ruche G, Goulet V, Bouyssou A (2011) "Bulletin of networks for surveillance of sexually transmitted infections. "Saint-Maurice: INVS. 1-17.