

Sexual Practices, Knowledge and Behavior of College Students Regarding Sexually Transmitted Diseases

Práticas Sexuais, Conhecimento e Comportamento dos Universitários em Relação às Infecções Sexualmente Transmissíveis

Prácticas Sexuales, Conocimiento y Comportamiento de los Universitarios en Relación a las Infecciones Sexualmente Transmisibles

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ABSTRACT

Objective: The study's purpose has been to identify and assess the practices, knowledge, and behavior of college students vis-à-vis Sexually Transmitted Diseases. **Methods:** It is a descriptive study with a quantitative approach, which was performed at a Public University in the *Rio de Janeiro* city with 255 students who answered a questionnaire. Data were analyzed using descriptive statistics. **Results:** Among the young investigated, 181 (71%) were women and 74 (29%) were men; 93.7% were within the age group from 18 to 24 years old; 194 (76%) were sexually active; 110 (43.1%) adopt the condom in all sexual intercourse. Young people consider that they have all the knowledge about Sexually Transmitted Diseases (87/34.1%); Believe that gonorrhea infection can occur when using public restrooms (80/31.7%), and that there is a cure for hepatitis (102/40%). **Conclusion:** The findings show that college students assume risky behavior and demonstrate lack of knowledge concerning both prevention and transmission of Sexually Transmitted Diseases.

Descriptors: Sexually Transmitted Diseases, Risk-taking, Young Adult, Nursing.

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RESUMO

Objetivo: Identificar e avaliar as práticas, o conhecimento e comportamento dos estudantes universitários em relação às Infecções Sexualmente Transmissíveis. **Método:** Estudo descritivo, quantitativo, realizado em universidade pública, no Rio de Janeiro com 255 estudantes que responderam a um questionário. Os dados foram analisados com aplicação da estatística descritiva. **Resultados:** Entre os jovens investigados 181 (71%) eram mulheres e 74 (29%) homens; (93,7%) tinham idades entre 18-24 anos; 194 (76%) eram sexualmente ativos; 110 (43,1%) adotam o preservativo em todos os intercursos sexuais. Os jovens consideram possuir todo conhecimento sobre as Infecções Sexualmente Transmissíveis (87/34,1%); acreditam que a infecção por gonorreia pode ocorrer ao utilizar banheiros públicos (80/31,7%), e que existe cura para hepatite (102/40%). **Conclusão:** Os achados evidenciam que os estudantes assumem comportamento de risco e demonstram fragilidades no conhecimento sobre a prevenção e transmissão das Infecções Sexualmente Transmissíveis.

Descritores: Doenças Sexualmente Transmissíveis, Assunção de Risco, Adulto Jovem, Enfermagem.

RESUMEN

Objetivo: Identificar y evaluar las prácticas, el conocimiento y el comportamiento de los estudiantes universitarios en relación a las Infecciones Sexualmente Transmisibles. **Método:** Estudio descriptivo, cuantitativo, realizado en una universidad pública, en Río de Janeiro con 255 estudiantes que respondieron a un cuestionario. Los datos fueron analizados con aplicación de la estadística descriptiva. **Resultados:** Entre los jóvenes investigados 181 (71%) eran mujeres y 74 (29%) hombres; (93,7%) tenían edades entre 18-24 años; 194 (76%) eran sexualmente activos; 110 (43,1%) adopta el preservativo en todos los intercursos sexuales. Los jóvenes consideran poseer todo conocimiento sobre las Infecciones Sexualmente Transmisibles (87 / 34,1%); Creen que la infección por gonorreia puede ocurrir al utilizar baños públicos (80 / 31,7%), y que existe cura para hepatitis (102/40%). **Conclusión:** Los hallazgos evidencian que los estudiantes asumen comportamiento de riesgo y demuestran fragilidades en el conocimiento sobre la prevención y transmisión de las Infecciones Sexualmente Transmisibles.

Descritores: Enfermedades de Transmisión Sexual, Asunción de Riesgos, Adulto Joven, Enfermería.

INTRODUCTION

Youth is a time of transition that brings about biological and cognitive changes, especially in adolescence, where hormones drive sexual development and social interactions, often marked by transgression and rebellion.¹ According to the Brazilian Youth Statute, young people it is every person within the age group from 15 to 29 years old.² The behavior of young people is marked by changes arising from the maturation process. With the end of adolescence and the search for new values, such as entering higher education, young people face new challenges and face situations that are shaping their personality. The sensations and emotions experienced at this moment will reinforce the concept of invulnerability of youth and may be represented by sexual freedom, which exposes young people to health risk behaviors.^{3,4} The young population, according to the Ministry of Health, more vulnerable to

Sexually Transmitted Diseases (STDs).^{5,6}

According to the Ministry of Health (2016), each year an estimated 937,000 new syphilis cases occur; 1,541,800 of gonorrhea; 1,967,200 chlamydia; 640,900 genital herpes and 685,400 Human Papillomavirus (HPV). In this context, it can be highlighted the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) with 842,710 cases registered since the beginning of the epidemic, in 1980, until June 2016, the incidence rate was 20.7 cases per 100,000 inhabitants has remained stable over the last ten years, with the young population having the greatest upward trend.^{5,6}

When it comes to the epidemiology of STDs, they are due to behavioral, social, political, technological and programmatic factors that favor situations of vulnerability to individuals or population groups that share common characteristics. Young people, in general, are aware of the importance of condom use for the prevention of STDs.^{7,8} However, research has shown that despite advances in the field of knowledge, there are flaws in the prevention process, which is a problem for the Brazilian public health to act upon and to modify the attitudes and preventive practices of the young group.⁹

Considering this framework, it is noteworthy that among the factors related to the high exposure of young people to STDs, the following can be highlighted: the early onset of sexual practices and the non-adoption of condoms in all intercourse; the lack of knowledge that weakens decision-making regarding sexual health; risk behavior with increased sexual partnerships, and the use of alcohol and other drugs.¹⁰⁻⁴

The need for STDs prevention among young people, such as college students, is the focus of investigations^{3,4,7-9} that seek to better understand the phenomenon that occurs in the fields of knowledge/behavior.⁹ The Brazilian youth, according to the authors⁹ presents a satisfactory level of knowledge regarding the modes of HIV transmission and generally use condoms more often in their sexual relationships with their partners, whether steady or casual, compared to other age groups. Nonetheless, there is still a high prevalence of risky practices for the transmission of pathogens related to sexually transmitted diseases such as discontinuity in condom use.⁹

Faced with this problem, the following questions came about: How are the sexual practices of college students? Do they know about STDs and their forms of transmission? Are young people concerned about STDs prevention?

Bearing the aforesaid in mind, this study intended: to identify the sexual practices, knowledge, and behavior of college students in regard to sexually transmitted diseases. Furthermore, to assess the sexual practices, knowledge, and behavior of college students concerning to sexually transmitted diseases.

METHODS

This research is part of the research “Assessing the knowledge, practices, and beliefs of college students concerning to sexually transmitted diseases” carried out in the Rio de Janeiro city, Rio de Janeiro State.

This is a descriptive study with a quantitative approach that was performed at the Nursing School and the Institute of Physical Education and Sports from a Public University over the period from 2013 to 2014.

The sample consisted of 255 students, 135 from undergraduate nursing and 120 from undergraduate physical education. Inclusion criteria were to be properly enrolled and attending any academic period. Considering that youth is a phase that has different chronological limits according to the different official bodies, the definition of the 2013 Youth Statute was adopted in this research. Thus, college students within the age group from 18 to 29 years old were included in the sample, excluding those under 18 years of age.

The study population consisted of 800 students, 300 of them from Nursing and 500 from Physical Education. To perform the sample calculation, a confidence level of 95% and a sampling error of 5% were established, reaching a set of 260 participants.

As a data collection instrument, we used a questionnaire with 50 closed questions organized with variables distributed in four axes: the sociodemographic, sexual profile, knowledge about sexually transmitted diseases and health care. Here, 22 questions were used, 5 related to students’ sociodemographic profile, 12 sexual practices and 5 knowledge about sexually transmitted diseases.

Data collection was preceded by a pilot test with 10 randomly selected students who agreed to participate in this step, making it possible to make adjustments to the instrument, size the application time and train the team involved. In the process of organizing the material, 05 questionnaires were excluded for not filling 01 or more pages of the instrument. The sample-set totaled 255 participants.

The collected data were tabulated and stored in the software Microsoft Excel 2013 for Windows, which also allows the organization of the findings for analysis with the aid of descriptive statistics.

The study complied with the formal requirements contained in national and international regulatory standards for research involving human subjects. The project was submitted to a Research Ethics Committee and approved under No. 058.3.2012. Participants were informed about the objectives of the research and their free participation and signed the Informed Consent Form (ICF).

The study included 255 students, 181 (71%) women, and 74 (29%) men; 239 (93.7%) were aged between 18 and 24 years. In the group investigated, 119 (46.66%) declared themselves white, 102 (40%) were single and 195 (76.47%) lived with their parents. Among the students, 244 (95.6%) had no children, 185 (72.55%) considered themselves religious, and 89 (34.90%) Catholics. Among the participants, 95 (37.2%) were doing paid work, and of these 80 (31.37%) were from physical education and 15 (5.88%) from nursing.

Sexual behavior

The sexual behavior of the students is presented in Table 1, showing that 194 (76.08%) of the participants are sexually active, and of these 126 (64.95%) were women and 68 (35.05%) men. In the sample-set, 122 (62.89%) began their sexual activities with ages between 15 and 18 years old. The average age at the beginning of sexual life was 17 years old.

Table 1: College students’ sexual behavior (n=194). Rio de Janeiro city, Rio de Janeiro State, 2015.

Sexual behavior	f	%
Age at the first sexual intercourse		
Less than 15 y.o.	24	12.37
From 15 to 18 y.o.	122	62.89
More than 18 y.o.	47	24.23
Did not inform	1	0.52
Sexual intercourse with steady partners in the last twelve months		
Yes	159	81.96
No	35	18.04
Sexual intercourse with casual partners in the last twelve months		
Yes	72	37.11
No	120	61.86
Did not inform	2	1.03
More than one sexual partner throughout life		
Yes	131	67.53
No	62	31.96
Did not inform	1	0.51
Sexual intercourse with same-sex partners		
Yes	22	11.34
No	172	88.66

Source: The authors, 2017.

Among the 194 sexually active youths, 131 (67.53%) reported having had more than one sexual partner throughout their lives.

Condom use among college students

Most students have made use of condoms, as shown in Table 2. Nevertheless, 83 (42.78%) of young people did not use condoms at all. Students who reported having casual partners adopted the condom more often (46/63.89%).

RESULTS AND DISCUSSION

Sociodemographic characterization

Table 2: Condom use among college students. *Rio de Janeiro city, Rio de Janeiro State, 2015.*

Condom use	f	%
Use of condoms at the first sexual intercourse (n=194)		
Yes	138	71.13
No	56	28.87
Use of condoms at all sexual intercourses (n=194)		
Yes	110	56.70
No	83	42.78
Did not inform	1	0.52
Use of condoms with com steady partners (n=159)		
Yes	70	44.03
No	87	54.72
Did not inform	2	1.26
Use of condoms with casual partners (n=72)		
Yes	46	63.89
No	24	33.33
Did not inform	2	2.78

Source: The authors, 2017.

There is low adherence of the group to the female condom, considering that among sexually active women (126), only 7 (5.55%) reported the use of the female condom. Among men, only 2 (2.95%) reported sexual activities with female condom use by their partners.

The knowledge concerning to sexually transmitted diseases

Among the 255 college students, 104 (47.78%) young people believe they have all the necessary knowledge about sexually transmitted diseases, while 141 (55.30%) do not believe this assertion and 10 (3.92%) participants did not respond. For most participants 250 (98.03%), a person can get an STD when having sex without using a condom. In the investigated group 157 (61.57%) young people reported not having all the necessary knowledge about the forms of STDs transmission, while 95 (37.25%) believe they know enough about the transmission of these infections and 3 (1.18%) could not inform.

Concerning the exposure to infectious agents, 247 (98.86%) believe they may be infected with HIV/AIDS or hepatitis C by sharing contaminated syringes and/or needles; 201 (78.80%) who can get an STD by using public restrooms. Among the infections that can be acquired when using toilets were listed gonorrhea, syphilis and HIV/AIDS with 80 (31.3%), 47 (18.14%) and 14 (5.4%) records, respectively. Young people (102/40.00%) believe that there is a cure for hepatitis C. Among the participants, 244 (95.67%) agreed that a person may have HIV even if they have a healthy appearance, while 4 (1.57%) disagree with this statement and 6 (2.35%) could not inform.

The sample contemplated consists mainly of young single women who live with their parents and perform paid work. These characteristics are similar to those of other institutionalized college students living in other regions of

Brazil.¹⁵ Female data are in line with the Higher Education Census, which shows the university population represented mostly by women, with an average age of 21 years old.¹⁶ These findings are also ratified in research on the socio-economic profile of students at Brazilian federal universities of the National Association of Directors of Federal Higher Education Institutions.¹⁵

College life enables young people to experience new experiences and broaden their circle of friendships, and these often influence their way of being and the expression of sexuality.² The young people investigated are sexually active and initiated sexual practices in adolescence, which corroborates the results of other studies on the subject, which indicate the onset of sexual activities in adolescents within the age group from 13 to 17 years old.^{17,18}

It is known, however, that the onset of sexual activity in adolescence associated with the possibility of a larger number of partners throughout life contributes to the increased risk of contracting a STD.¹⁹ It should be added that there are distinctions in perception of sexual activity and love life among young people of the present generation with others. Therefore, it can be observed today the multiplicity of sexual partners, the diversity and forms of relationships, which favor the greater vulnerability of this group to infections.²⁰ According to the Ministry of Health the high prevalence of HPV infection, which affects mainly adolescents and young people may be associated with unprotected sex, and the number of sexual partnerships. The highest rates of gonococcal and chlamydial infection were also observed in younger people.⁵

It is a fact that young people, regardless of gender, are a vulnerable segment in all societies of the globalized world.²⁰ In the sexual practices of college students there is a change in the pattern of female behavior. Young girls are independent and able to decide freely about the exercise of their sexuality and the use of contraceptive methods. Currently, however, the assumption of risk behaviors, such as the increase in the number of sexual partners and non-adherence to condom use, contributes to women becoming vulnerable to STDs/AIDS.²¹

The undergraduates investigated reported maintaining steady relationships and few confirmed the presence of casual relationships. Nevertheless, a study²⁰ indicates that young single people are more likely to have more casual relationships with multiple partners. Regarding the same-sex relationships, few students reported this type of relationship, which may suggest the existence of prejudice when dealing with gender identity.

Herein, it can be observed that sexually active college students made use of the condom. Nonetheless, it is noted that there is a higher prevalence of condom use at first sexual intercourse and with casual partners. In times of STDs, condom use should be the rule for all types of relationships, and especially for unplanned sex, indicating that having a condom for personal use should be incorporated into young

people's daily lives,⁹ predicting a casual sexual relationship.

Young people often lack the self-confidence to negotiate condom use in their casual affective relationships.^{9,10} In the face of conflicting situations in which the opportunity to have a sexual relationship arises, but the condom is not available, or the fear and shame of interrupting the sexual act, probably a classification between "fixed" and "non-fixed" romantic relationships might indicate what should be the practice of condom use to be followed.⁹

Although there is an increase in condom use in sexual intercourse, it is not adopted in all sexual intercourse, especially when the partner is fixed (steady relationship), which may be related to gender differences, age, type of affective involvement, gender issues related to pleasure and omnipotence, then relativizing prevention.¹³

Among the condoms available, the male is the best known and most used among young people,^{13,9} especially among single people.¹⁰ Although the group investigated has a higher prevalence of women, the female condom is little used in sexual relations. The difficulty in using, handling and the high cost in relation to the male condom lead to the non-adherence of the female condom by young women in sexual intercourse.²²

In order to avoid an unplanned pregnancy, it is common in steady relationships that replace condom use with the contraceptive pill, due to the trust established in this type of affective involvement, showing that the possibility of acquiring a disease is not considered. The denial of the risk taken by this behavior may be associated with the illusion of invulnerability.^{3,21}

The research also confirms findings from other studies regarding condom use, alcohol consumption, and illicit drug use before sexual intercourse.¹⁰ Investigation into STD reporting in crack users in the Midwest region of Brazil presented the first data between alcohol and crack consumption that favor the adoption of risky sexual practices such as multiple sexual partners, inconsistent condom use and sexual intercourse with sexually transmitted diseases (STI) and prostitution, which exposes crack users to sexually transmitted diseases.²⁴

A study¹⁴ suggests that Brazilian college students are often involved with drug use, probably due to their easy access. Many young people when consuming these substances do not pay attention to condom use and assume a risky behavior towards STDs.^{4,12}

Students' knowledge regarding the forms of STDs transmission such as gonorrhea, syphilis and chlamydia - whose etiological agents are bacteria; and hepatitis C, HPV and HIV/AIDS - which are caused by viruses were evaluated, considering that these infections are the most prevalent in the young population.

College students have shown knowledge of HIV/AIDS and how to prevent it, but it is noted that although they provide information about the form of exposure to HIV, they do not seem to incorporate these practices into their

daily lives and sexual relations, similar to other studies.²⁰ In this sense, it is believed that the risk of becoming infected with an STD is not a sufficient reason to adopt appropriate preventive measures. There is still some immaturity about abstract thinking, which can make the adolescent not consider its vulnerability, exposing itself to risks without assessing or predicting the consequences.^{8,9}

The distinction between knowledge and practice on a given subject can be observed in this study regarding condom use. Students evaluating the statement: "Using alcohol or drugs can make people have sex without a condom," 123 (48.23%) agreed, and only 16 (6.27%) disagreed with the statement. It may be noted that while they are told that alcohol and drugs can interfere with a person's decision-making power and promote inappropriate health behavior, young people often ignore this situation and risk contracting an STD or unwanted pregnancy.^{8,10,23}

When analyzing the knowledge of young people in relation to STDs, it was observed that HIV/AIDS stands out in the group's level of information compared to other STDs. In this regard, studies^{3,20} have found that AIDS prevention measures adopted by young people have been ineffective in preventing HIV infection, and some behaviors indicate an inconsistency between discourse and prevention practice, enabling involvement in unprotected sexual practices.

The process of transforming knowledge about HIV/AIDS in adopting protective practices is associated with understanding and the ability to absorb information, assimilating it and being influenced by social, gender and race issues.^{5,23}

The findings evidenced the lack of knowledge of young people about the forms of exposure to STDs, who believe they are exposed to sexual infections through the use of public toilets and that hepatitis C is a curable infection. Regarding students inserted in the academy context, this research corroborates other findings indicating that young college students lack knowledge about STDs, do not adopt safe sexual behaviors and have low-risk perception in their sexual practices.^{4,9}

CONCLUSIONS

Herein, it was possible to assess the sexual practices, knowledge, and behavior of college students in relation to STDs. Students present practices that pose risks to sexual and reproductive health, considering that they do not adopt condoms continuously in all sexual intercourse, and are unaware of the forms of exposure to the causative agents of STDs, which makes them vulnerable

Although they report using condoms during sexual intercourse, especially with casual partners, the practice is not constant. When they consume alcohol and drugs, or when the relationship is with a steady partner, they do not use condoms and therefore do not value STDs prevention practices.

It can be observed in the findings the lack of knowledge of young people in relation to STDs and their modes of transmission, which directly interferes with the prevention of these diseases. Hence, it is recommended that educational practices be carried out in educational institutions, especially in universities, to help clarify this group and minimize the risks to youth health and exposure to sexually transmitted diseases.

This study was limited by the number of young people investigated, so, it is considered appropriate to increase the sample size and areas covered.

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