



ORIGINALES

Young male university students and condom use

Jovens universitários do gênero masculino e a utilização do preservativo

Jóvenes universitarios de género masculino y el uso del preservativo

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ABSTRACT:

Objective: to analyze systematic condom use by male university students.

Method: A cross-sectional study carried out in two higher education institutions from Rio de Janeiro, with 661 sexually active students aged 18-29, who answered a questionnaire. The data were analyzed using the Statistical Package for Social Sciences software through descriptive and inferential statistics, with application of Pearson's chi-square test.

Results: The data show that young people are single (61.98%), heterosexuals (87.37%) and that they do not use condoms with steady (45.40%) or occasional (23.55%) partners. Marital status, sexual orientation, religious belief, use of alcohol and other drugs before the last sexual relationship, risk perception and past history of sexually transmitted infections are determining factors for condom use (p-value<0.05).

Conclusion: Considering the characteristics inherent to youth and the sociocultural factors involved, it is noted that the students assume risk behaviors in the face of sexually transmitted infections with non-systematic condom use.

Keywords: Young Adult; Sexually Transmitted Diseases; Condoms; Primary Prevention; Men's Health.

RESUMO:

Objetivo: Analisar o uso sistemático do preservativo por universitários do gênero masculino.

Método: Estudo transversal realizado em duas instituições de ensino superior no Rio de Janeiro, com 661 estudantes de 18-29 anos, sexualmente ativos, que responderam um questionário. Os dados foram analisados com emprego do *software* Statistical Package for the Social Sciences através da estatística descritiva e inferencial, com a aplicação do teste qui-quadrado de Pearson.

Resultados: Dados demonstram que os jovens são solteiros (61,98%); heterossexuais (87,37%); não usam preservativo com parcerias fixas (45,40%) ou eventuais (23,55%). A situação conjugal, orientação sexual, crença religiosa, uso de álcool e outras drogas antes da última relação sexual, percepção de risco e história pregressa de infecção sexualmente transmissível são fatores determinante para uso do preservativo (p-valor<0,05).

Conclusão: Considerando as características próprias da juventude e fatores socioculturais envolvidos, nota-se que os estudantes assumem comportamentos de risco frente às infecções sexualmente transmissíveis com a utilização não sistemática do preservativo.

Palavras chave: Adulto Jovem; Doenças Sexualmente Transmissíveis; Preservativos; Prevenção primária; Saúde do Homem.

RESUMEN:

Objetivo: Analizar el uso sistemático del condón por estudiantes universitarios varones.

Método: Estudio transversal realizado en dos instituciones de educación superior de Río de Janeiro, con 661 estudiantes sexualmente activos de 18 a 29 años que respondieron un cuestionario. Los datos fueron analizados con el software Statistical Package for Social Sciences mediante estadística descriptiva e inferencial, con la aplicación de la prueba chi-cuadrado de Pearson.

Resultados: Los datos muestran que los jóvenes son solteros (61,98%); heterossexuales (87,37%); no usan condones con parejas fijas (45,40%) o ocasionales (23,55%). El estado civil, la orientación sexual, las creencias religiosas, el consumo de alcohol y otras drogas antes de la última relación sexual, la percepción de riesgo y antecedentes de infecciones de transmisión sexual son un factor determinante para el uso del condón (valor de p <0,05).

Conclusión: Considerando las características de la juventud y los factores socioculturales involucrados, se observa que los estudiantes asumen conductas de riesgo ante las infecciones de transmisión sexual con el uso no sistemático del condón.

Palabras clave: Adulto joven; Enfermedades de transmisión sexual; Condones; Prevención primaria Salud de los hombres.

INTRODUCTION

Sexually Transmitted Infections (STIs) have high incidence and prevalence rates worldwide. It is estimated that more than one million curable STIs such as chlamydia, gonorrhoea, syphilis and trichomoniasis occur each day and that there are 417 million prevalent cases of herpes simplex virus infection and approximately 291 million women infected with the Human Papilloma Virus (HPV)⁽¹⁾.

Risk Sexual Behavior (RSB) involve unprotected sex with unknown and multiple partners, being common among university students⁽²⁾. Young individuals are more frequently exposed to risks, resulting in unwanted consequences for sexual and reproductive health, such as STIs, unplanned pregnancies and sexual violence⁽³⁾. The university environment can contribute to social changes in the students' lives, including sexual behaviors. In the male context, a study with young men from a university in southern Brazil found that male students tend to have a higher RSB⁽⁴⁾.

It is known that men are often more exposed to situations that put their health at risk^(5,6). This behavior is associated with sociocultural aspects arising from the feeling of invulnerability and masculinity of the male gender, which is understood as [...] a symbolic space that serves to structure the identity of being a man, modeling behavior and emotions to be adopted [...]⁽⁷⁾. Understood from the perspective of social, economic, generational and cultural dimensions, depending on the historical context, the word "masculinities" is used to encompass this plurality^(8,9).

Young people's knowledge about STIs is usually insufficient, as some studies indicate^(10,11). Even university students who have access to information do not often adopt practices to prevent these diseases because they believe in their invulnerability or are unaware of the transmission of infections, which is an aggravating factor for the spread of STIs⁽¹²⁾. Lack of treatment or inadequate treatment of STIs can lead to complications such as infertility, congenital infections, tumors and miscarriages, as well as increase the transmission risk of STIs, especially HIV⁽¹³⁾. Having knowledge about the infections transmitted due to unprotected sex, the modes of transmission and the consequences for health, in addition to methods for preventing these diseases, are relevant aspects for prevention^(11,14).

STI prevention is related to wide disclosing about the symptoms and forms of transmission, seeking to guide and increase knowledge of the population. In the context of young people, a national study indicates that educational institutions are the best places to access this information, being more effective than journals or television stations⁽¹⁵⁾.

Given this scenario and the relevance of the theme, the study aimed at analyzing systematic condom use by young male university students.

METHODS

A descriptive and cross-sectional study conducted in accordance with the recommendations set forth in the Strengthening the Reporting of Observational Studies in Epidemiology statement. The setting were two Higher Education Institutions (HEIs), one public (HEI1) and the other private (HEI2), located in the municipality of Rio de Janeiro, Brazil. The reason for choosing the HEIs was driven by the variety of courses offered, which made it possible to compare sexual and preventive practices against the STIs adopted by the students at both universities.

University students aged from 18 to 29 years old, regularly enrolled and present in the research field at the time of data collection, participated in the matrix research. In both institutions, samples were collected uniformly stratified by gender, with a 95% confidence interval and 5% sampling error, with 384 men and 384 women in each HEI, totaling 1,536 students. The data were collected at two moments, in 2016 at the private institution and in 2017 at the public institution.

The data collection instrument used was a structured questionnaire with 60 questions, consisting of open and closed questions, containing variables related to sociodemographic characteristics, sexual practices, knowledge about STIs and prevention practices. The instrument adopted was an adaptation of the model used by the Brazilian Ministry of Health, in the population-based survey, through the study entitled "Research on Behaviors, Attitudes and Practices of the Brazilian Population". The aforementioned study is a reference in the elaboration of indicators for monitoring the STI/AIDS epidemic in the country⁽¹⁶⁾. Considering that this study is a clipping of the matrix research, 16 variables of this instrument were selected, related to social characterization and to sexual and prevention practices. To meet the objectives of this research, only 768 male participants were selected from the matrix research database. Regarding the analysis of condom use, only sexually active participants were included, totaling 661 university students.

The data were tabulated, organized and stored in a database using Microsoft Excel 2011. They were analyzed with the support of the Statistical Package for Social Science (SPSS) program, version 22, using descriptive statistics, absolute and relative frequencies and uni- and bivariate analyses. For the inferential analysis, Pearson's chi-square test was used to test the null hypothesis of independence between the variables. The hypothesis is rejected when the p-value is below 0.05.

The study respected all the ethical aspects, that is, the research was submitted to and approved by the Ethics Committees of both institutions, the participants were instructed about their rights, had guaranteed confidentiality and anonymity with their participation in the research and signed the Free and Informed Consent Form (FICF). After approval the Ethics Committees of both institutions issued the following opinion numbers: 902,543 and 1,577,311.

RESULTS

The participants' sociodemographic characterization shows that the HEI students are single/without a partner (476 – 61.98%); declare themselves heterosexual (671 – 87.37%), homosexual (59 – 7.68%) and bisexual (27 – 3.52%); do not work (454 – 59.12%); self-declared as white-skinned (391 – 50.91%); and consider themselves religious (438 – 57.03%), with greater representation of the Catholic (179 – 40.87%) and Evangelical (135 – 30.82%) religions. There is predominance of university students aged between 18 and 24 years old, young-young (634 – 82.5%). There are 134 participants (17.45%) among the young-adults (from 25 to 29 years old).

Table 1 presents the crossing of variables with condom use in all sexual relations in the last 12 months. It is observed that condom use has a statistically significant difference ($p < 0.05$) for the “marital status”, “religiousness”, “sexual orientation”, “use of alcohol or drugs before the last sexual relationship”, “risk perception regarding the possibility of acquiring an STI” and “having already had an STI” variables. Although the p-value is not below 0.05, age group evidenced a statistical difference of 0.05, suggesting that young-young individuals (18-24 years old) would systematically make lesser use of condoms.

Table 1 – Distribution of condom use in all sexual relationships by young male university students, according to social, behavioral and attitudinal aspects regarding STIs. Rio de Janeiro, RJ, Brazil. (n=661)

Variables	Condom use in all sexual relationships in the last 12 months						*p
	No		Yes		Total		
	n	%	n	%	n	%	
Marital Status							0.000
Married	16	4.43	6	2.01	22	3.33	
Single	177	49.03	208	69.56	385	58.34	
Steady partner	168	46.54	85	28.43	253	38.33	
Age group							0.05
18-24 years old	80	22.10	48	16.05	128	19.36	
25-29 years old	282	77.90	251	83.95	533	80.64	

Knowledge area							0.2
Biology/Health	41	11.33	39	13.04	80	12.10	
Exact Sciences	180	49.72	163	54.52	343	51.89	
Humanities	141	38.95	97	32.44	238	36.01	
Skin color							0.2
Asian	6	1.71	3	1.06	9	1.42	
White	194	55.27	146	51.41	340	53.54	
Brown	91	25.93	92	32.39	183	28.82	
Black	60	17.09	43	15.14	103	16.22	
Religion							0.04
No	176	48.89	121	40.88	297	45.27	
Yes	184	51.11	175	59.12	359	54.73	
Sexual orientation							0.01
Bisexual	8	2.24	12	4.10	20	3.08	
Heterosexual	330	92.44	248	84.64	578	88.92	
Homosexual	19	5.32	33	11.26	52	8.00	
Use of alcohol or drugs before the last sexual relationship							0.000
No	223	61.77	227	76.17	450	68.28	
Yes	138	38.23	71	23.83	209	31.72	
Risk perception regarding the possibility of acquiring an STI							0.000
Impossible	64	17.73	91	30.85	155	23.63	
Hardly possible	181	50.14	154	52.20	335	51.07	
Neither possible nor impossible	51	14.13	30	10.17	81	12.35	
Possible	56	15.51	19	6.44	75	11.43	
Very possible	9	2.49	1	0.34	10	1.52	
Search for health care							0.5
No	193	53.61	149	51.03	342	52.45	
Yes	167	46.39	143	48.97	310	47.55	
HIV test							0.2
No	222	61.84	196	65.99	418	63.72	
Yes	137	38.16	101	34.01	238	36.28	
Already acquired some STI							0.005
No	179	85.65	240	94.49	419	90.50	
Does not remember	10	4.78	6	2.36	16	3.46	
Yes	20	9.57	8	3.15	28	6.04	
Total	362**	100	299**	100	661**	100	

Note: * Pearson's chi-square test.

** Some variables do not add up to the total number of participants because they have not been answered.

In relation to the data presented, the research suggests that condoms are more systematically used among young single university students, who have some religious belief, homo/bisexual orientation, who did not use alcohol or drugs before the last sexual relationship, who perceive themselves at risk for STIs and who have already acquired some STI.

Table 2 shows condom use in the last twelve months according to the type of sexual partner. In both institutions, most of the participants have sex with steady partners (70.95%), but do not always use condoms (45.40%). With regard to occasional partners, higher condom use is observed (76.45%). It is therefore noted that most of the students reported using condoms more frequently in sexual relationships with casual partners than with steady partners.

Table 2 – Distribution of the male university students from two higher education institutions, according to sexual practices with steady and casual partners and condom use in the last twelve months. Rio de Janeiro. n=661

	HEI1		HEI2		Total	
	f	%	f	%	f	%
Sexual practices with a steady partner						
Yes	227	69.85	242	72.02	469	70.95
No	58	17.85	63	18.75	121	18.31
Not reported	40	12.30	31	9.23	71	10.74
Condom use with a steady partner						
Yes	140	61.67	115	47.92	255	54.60
No	87	38.33	125	52.08	212	45.40
Sexual practices with a casual partner						
Yes	165	50.77	186	55.36	351	53.10
No	120	36.92	120	35.71	240	36.31
Not reported	40	12.31	30	8.93	70	10.59
Condom use with a casual partner						
Yes	136	84.47	127	69.40	263	76.45
No	25	15.53	56	30.60	81	23.55

Key: HEI – Higher Education Institution.

Note: Only sexually active participants were considered, 325 from HEI1 and 336 from HEI2 (n=661), and the answers that did not apply were excluded.

DISCUSSION

In the last Brazilian census, 55.3% of the population reported single marital status and pointed out that the mean age of young people to get married is 24.4 years old. Considering the investment in education and the inclusion of young people into the labor market, marriage is no longer a priority, which justifies the number of participants who identified themselves as single. This sociodemographic profile corroborates with the participants surveyed and with other studies^(14,17,18).

In relation to sexual orientation, the majority declared themselves as heterosexual. Young homosexuals and bisexuals had little representation in the institutions. Furthermore, sexual orientation is related to cultural and religious values that often reinforce the exclusive idea of heterosexuality as a heteronormative behavior. Many participants, however, may not assume their true sexual orientation, due to fear.⁽¹⁹⁾ When analyzing the association between sexual orientation and condom use, the data evidence that homosexuals/bisexuals use more condoms than heterosexuals. In a study carried out in Rio de Janeiro city's carnival, the data indicated that homo/bisexual men have better knowledge and behaviors to deal with HIV than heterosexual men⁽²⁰⁾.

Continuous condom use is less frequent in the age group between 18 and 24 years old among the university students in this research, although it is not statistically significant. Data from the Brazilian Ministry of Health, in 2018, indicated that men led the HIV infection rates in all age groups. However, in the age group from 20 to 24 years old, the difference between men and women was four times greater.⁽²¹⁾ Regardless of age, young people adopt risk behaviors due to their characteristics, such as immediacy, and act impulsively, without reflection, exposing themselves to risk^(19,22). Despite being an important topic, even today, sexual practices are little discussed, either in the family environment or among friends, being considered a taboo in some contexts. The relative sexual freedom identified by different affective-sexual experiences among them, increasingly visible in the media, challenges them to face social rules and gender relations, as well as to experience sexual life at an early stage due to lack of prior knowledge^(23,24).

It is verified that access to education and knowledge presents an inversely proportional relationship, that is, in cases of low schooling, it is possible to notice an increase in risk behaviors. Access to information prevents the adoption of such behaviors. A study verified that a group of young individuals did not use condoms, or used them incorrectly, due to lack of information. Thus, to promote STI prevention in that setting, the most effective method was to demonstrate correct condom use⁽²⁵⁾.

STI prevention is directly related to continued condom use during sexual relationships. In the United States, a research study showed that use was reduced from 62% to 54% in the 2007-2017 period⁽²⁶⁾. In Brazil, the youth group does not use condoms regularly. In the age group from 15 to 24 years old, there is a reduction in periodic condom use, both with casual partners and with regular partners.⁽¹⁶⁾ This risk behavior exerts a direct impact on the increase in the number of HIV/AIDS cases among young individuals.

The association between condom use and marital status was evaluated. In the sample set, there are more single men using condoms than married men or men in steady relationships. Trust in the partner and steady relationships are factors associated with condom use (or not). Thus, trust in the sexual partner often exerts a negative interference with consistent condom use. A number of research studies show that 40% of the young individuals believe that it is not necessary to use a condom in a stable relationship or with steady partners^(22,23). Thus, the greater the sex frequency, the greater the chance of not using a condom⁽²⁴⁾.

The importance of educational activities for the prevention of STIs in this group is a relevant aspect to be considered; however, it is known that access to information currently permeates the different communication means. To reverse this scenario, education is the appropriate space to disseminate knowledge and practices on the prevention of these diseases. In France, sex education at school is a legal requirement and the HIV prevalence rates in the country are three times lower when compared to Brazil^(27,28).

Since the beginning of the HIV epidemic, governmental agencies and non-governmental organizations have made massive investments to reach vulnerable groups or groups more exposed to the contamination risk, such as homosexuals. It should be noted that the transmission of HIV and other STIs does not depend on sexual orientation, but on not using condoms. Heterosexual groups, however, have little expression in campaigns because they do not belong to the key and priority populations. Nevertheless, health promotion efforts are prioritized for specific populations, as certain groups are affected in different ways. Consequently, we seek to ensure equality: offering more to those who need it most^(20,28).

Non-use of condoms was also influenced by the consumption of alcohol and/or other drugs before sexual intercourse among the study participants. Use of these substances increases sexual libido and interferes with the individual's decision-making power, and the reasons for their use are need for fun and search for pleasure, characteristic of the participants' age group.⁽²⁹⁾ In Brazil, consumption of alcoholic beverages is a recurrent practice among young people and the general population. It is usually a relaxation moment among friends, and they are also consumed before sexual practices.

A study carried out with male university students pointed to appreciation of the use of alcohol and/or other drugs as a way of dealing with the demands and stress of university life. Consumption of these substances usually provides an identity and a sense of belonging in that social context, and shows the influence of culture on the participants' behaviors and practices⁽²⁹⁾.

The school, the family and the health professionals play a fundamental role in providing guidance on condom use and the importance of safe sex for the prevention of STIs. One of the most complete strategies for the prevention of STIs is the periodic monitoring of men's health but, as a result of the sociocultural, historical and gender issues, health care spaces suffer from male absence. How to make this young man, whose thinking is one of invulnerability, virility and unconcern about the future, enter the health units? How to encourage healthy attitudes and promote self-care?⁽³⁰⁾.

In the group surveyed, the search for health care in the last twelve months was evaluated, verifying that more than half of the participants reported not having done so. There was no statistical significance when associating the search for care and condom use by young people. It is also added that the young population and men do not occupy a space in the Primary Health Care units. These are groups that, when seeking care, in general, already have a health problem that needs assistance. There is no concern or priority in this group for the prevention of health problems in their life contexts.

The study had a limitation in data collection in only one Brazilian state capital city. Social, political, cultural and educational aspects can influence male behaviors and condom use. Another limitation was the use of a strictly quantitative approach, which favored only objective data, with replication in other settings being opportune, with other approaches to capture subjective aspects, according to the participants' cultural context.

CONCLUSION

The young university students researched present RSBs in relation to the STIs. Condom use is not systematical. Its use, in general, is associated with the type of partners, either steady or casual. It is known that young people's behavior depends on sociocultural factors such as beliefs, values and ways of life of the society to which they belong. These constructions of masculinities are related to the life experiences of these young individuals, and exert direct effects on the way in which they experience sexuality and their sexual and reproductive life. Understanding this context by professionals working in health promotion services is fundamental.

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