

ORIGINAL ARTICLE

Sexual Health of University Students: Care Practices Among Women and Men

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Highlights:

1. Young people recognize condom use as the best method to prevent STI.
2. Condom use is inconsistent in participants sexual lives.
3. Both sexes had inadequate/unsatisfactory STI prevention practices.

ABSTRACT

Objective: comparing sexual health care practices according to the gender of university students. **Method:** a cross-sectional study with a quantitative approach. The participants were 601 university students, aged between 18 and 29, from a public higher education institution in the city of Rio de Janeiro, Brazil. The data collection instrument was a questionnaire. The data were analyzed with the aid of the software Statistical Package for the Social Sciences, being applied the descriptive and inferential statistics. **Results:** female students start sexual practices later, seek more health services, and have fewer sexual partners throughout life and in the same period, compared to male students. Men have more frequent use of condoms. **Conclusion:** in both genders there are risky sexual practices. Sociocultural aspects reverberate health vulnerabilities that need to be addressed.

Keywords: Young adult; gender studies; student health; sexual and reproductive health; health services for students; universities.

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INTRODUCTION

The increasing number of Sexually Transmitted Infections (STIs) in the young population stimulates studies about knowledge, vulnerabilities, prevention practices and sexual health care, in different scenarios. In Brazil, according to a national household sample survey, one fifth of the national population is composed of young people aged 16 to 29 years, who represent approximately 43 million individuals¹. According to the Census of Higher Education, in 2017, there were 1,491,371 young people enrolled in public and private Higher Education Institutions. Of this total, 931,321 were under the age of 20, while 560,002 were concentrated in the age group of 20 to 29 years².

As far as STIs are concerned, it is estimated that one million new cases of only four curable infections occur worldwide among people aged 15 to 49 years, this amounts to more than 376 million new cases of chlamydia, gonorrhea, trichomoniasis and syphilis. These STIs have a profound impact on health and if left untreated, they can lead to serious and chronic health effects, including neurological and cardiovascular diseases, infertility, ectopic pregnancy, stillbirths and increased risk of HIV. These infections are also associated with significant levels of stigma and domestic violence³⁻⁴. Although infection rates vary according to location, culture, sexual health habits and availability of health services, in general, young people tend to have a higher risk of getting STIs. This is due to several factors, such as the beginning of sexual life, lack of comprehensive gender education, risk behaviors and multiple partners, and access to sexual health services⁵.

Epidemiological data from the United States indicate that two-thirds of all chlamydia cases and more than half of gonorrhea cases occur in people aged 15 to 24 years. Regarding syphilis, more than 64% of cases of primary and secondary syphilis occur in individuals aged between 15 and 34 years⁶. In Brazil, it is estimated that 10 to 12 million infections occur per year of chlamydia, gonorrhea, trichomoniasis and syphilis, and 25% of cases are diagnosed in the population of young people up to 25 years⁷.

The university environment, because it concentrates a significant number of young people, is a favorable space for the development of research with this population contingent. Studies show that vulnerability caused by risky sexual behavior, little knowledge about infections transmitted by unprotected sex and biopsychosocial changes during youth, may favor the high rates of STIs found in the young population^{4,7-10}.

Men and women are groups crossed by social and cultural roles. Understanding the dynamics and interaction of these roles in sexual health care practices is of paramount importance. Historically, it is believed that women take better care of their health than men; these are usually considered absent and/or invisible in health services¹¹. In this context, it is believed that young university students, considering the level of information and education, tend to be more careful in their sexual health care practices than male university students.

Thus, this study aimed to compare sexual health care practices according to the gender of students of a public university.

METHOD

A cross-sectional study with a quantitative approach was conducted with students from a public institution of higher education, located in the city of Rio de Janeiro. The choice of scenario was due to the diversity of courses that the institution offered on the same campus, something possible by its verticalization through 13 floors. In this way, it promotes an academic exchange of 32 thousand

students to its more than 40 undergraduate courses, which share 292 classrooms, 12 libraries, 24 auditoriums and 111 laboratories.

University students aged between 18 and 29 years participated in the study. For the delimitation of the age group, it was adopted as reference the Youth Statute, Brazil, which considers young the population aged between 15 and 29 years. Students under 18 years of age were not included for legal reasons, since the consent of those responsible for participating in research with human beings is required. The criteria for inclusion in the study were: to be regularly enrolled in the institution of higher education, to be present at the time of data collection and to belong to the age group defined.

Students absent from the educational institution due to sick leave or enrollment lock were not part of the sample set. Given the impossibility of acquiring the number of students by gender and age, a uniform stratified sample by gender was used. To define the sample size, we used the conservative sample size calculation for infinite populations, with 95% confidence interval and sampling error of 5%. In this sense, 768 questionnaires were applied, 384 in men and 384 in women. However, in this investigation, only the data of sexually active students were analyzed, being 325 male and 276 female, making a total of 601 participants.

The data collection instrument used was a structured questionnaire with 60 questions, adapted for the population group surveyed, young university students. The elaboration of this instrument was based on the national study “Survey of Behaviors, Attitudes and Practices of the Brazilian Population”. This study was a population-based survey commissioned by the Brazilian Ministry of Health, being a reference in the construction of indicators for the monitoring of the STI/AIDS epidemic in the country. For this investigation, the variables related to sociodemographic profile, knowledge about STIs and sexual health care practices were selected, totaling 22 variables.

To evaluate prevention practices, the classification by a seven-point system was adopted, according to figure 1. Zero score is considered adequate/satisfactory prevention practice, score higher than zero is considered inadequate/unsatisfactory practice. The score can range from zero to seven, the higher the score, the greater the vulnerability to STI⁹.

Variables	Punctuation		
	Yes	No	Did not inform
Use of condoms in all sexual relations	0	1	0
Condom use with steady partners	0	1	0
Condom use with casual partners	0	2	0
Use of alcohol and/or other drugs before the last sexual intercourse	3	0	0

Figure 1- Score of the variables selected to analyze the practices adopted by university students to prevent sexually transmitted infections

Source: Ramos; Spindola; Oliveira; Martins; Lime; Araújo, 2020.

Data collection took place during the first semester of 2019. The students’ approaches were carried out in the common living areas of the university. The average time to complete the questionnaire was 10 minutes. Students who agreed to participate responded to the questionnaire by returning it immediately to the researcher, avoiding consultation with other sources of information.

The data were organized in an Excel 2016 spreadsheet and exported to the Statistical Package for the Social Sciences (SPSS) software. In the discrete and continuous quantitative variables of symmetric distribution, measures of central tendency were used. In the nominal qualitative variables, in addition

to the absolute and relative frequency distributions, the Pearson Chi-square test was used for two independent samples, with a significance level of 0.05 (5%) and a 95% confidence interval.

All ethical aspects contained in Resolution 466/2012 of CNS/MS were respected. The project was approved by the Research Ethics Committee of the public educational institution, under the opinions n. 902,543 and n. 3,396,324.

RESULTS

The sample set of this study is composed of 601 sexually active participants, 325 (54.08%) male and 276 (45.92%) female. Regarding the age group, 469 (78.04%) students were aged between 18 and 24 years and 132 (21.96%) from 25 to 29 years – the average age was 22 years (SD = 2.8). Regarding the distribution of skin color, 289 (48.09%) declared themselves brown/black, 280 (46.58%) white, 16 (2.66%) said they did not know how to respond and 16 (2.67%) another.

Regarding knowledge about STI, 503 (83.69%) denied having sufficient knowledge; however, 87 (14.48%) stated that they had sufficient knowledge of the subject and 11 (1.83%) did not. Regarding the method of prevention of STIs, 560 (93.18%) reported knowing the condom and at least some other method for prevention; 27 (4.49%) denied knowing any method and 14 (2.33%) preferred not to. Among the methods for the prevention of STIs reported by the students, although most indicate the use of condoms, there were still terms such as: abstinence (20 - 3.33%), partner fixed (8 - 1.33%) and contraceptives (6 - 1%). However, 576 (95.84%) say they agree that condoms are the best method of prevention for STIs and 434 (72.21%) that alcohol and/or other drugs interfere with condom use. The following tables will present the results of sexual health care practices in an analysis according to gender.

Table 1 shows that the condom was more used in the first sexual intercourse and that its use decreases throughout the sexual life. The average age of the first sexual intercourse was 17 years (SD = 2), with a minimum age of 11 years and a maximum of 28 years. In the comparative analysis between the genders, the data show that men start their sexual lives earlier, use condoms more frequently in all sexual relationships, have more sexual partners throughout life and also in the same period.

Table 1 – Distribution of university students at a public university according to gender, age group at first sexual intercourse, adoption of condoms and negotiation of condoms during sexual relations. Rio de Janeiro, RJ, Brazil, 2019 (N=601)

Variables	Gender				Total		†p
	Feminine		Masculine		n	%	
	n	%	n	%			
Age range of first sexual intercourse							0.047
From 11 to 16	108	39.13	159	48.92	267	44.43	
From 17 to 22	157	56.88	158	48.62	315	52.41	
From 23 to 28	9	3.26	3	0.92	12	2.00	
Uninformed	2	0.72	5	1.54	7	1.16	
Use of condoms during first sexual intercourse							0.44
Yes	198	71.74	242	74.46	440	73.21	
No	77	27.9	83	25.54	160	26.62	
Uninformed	1	0.36	-	-	1	0.17	

Use of condoms in all sexual relations							0.001
Yes	98	35.51	159	48.92	257	42.76	
No	178	64.49	166	51.08	344	57.24	
Use of the female condom							0.02
Yes	10	3.62	20	6.51	30	4.99	
No	261	94.57	288	88.62	549	91.35	
Uninformed	5	1.81	17	5.23	22	3.66	
Negotiation of condom use							0.194
Yes	75	27.17	99	30.46	174	28.95	
No	126	45.65	144	44.31	270	44.93	
In part	66	23.91	79	24.31	145	24.13	
Uninformed	9	3.26	3	0.92	12	2.00	
More than one sexual partner throughout life							0.000
Yes	173	62.68	267	82.15	440	73.21	
No	101	36.59	58	17.85	159	26.46	
Uninformed	2	0.72	-	-	2	0.33	
More than one sexual partner in the same period							0.000
No	217	78.62	207	63.69	424	70.55	
Yes	57	20.65	115	35.38	172	28.62	
Uninformed	2	0.72	3	0.93	5	0.83	
Total	276	100	325	100	601	100	

Note: † Pearson's Chi-Square Test

Source: Prepared by the authors, 2019.

Table 2 shows the values found for the presence of partnership (fixed or eventual) and condom use by university students. It is important to highlight that among the 601 participants in the study, 546 (90.85%) stated sexual relationship in the last 12 months. Male students have more potential partnerships, while female participants have more fixed partnerships. Regarding the use of condoms, in both types of partnerships, male participants reported higher condom use.

Table 2 – Distribution of students at a public university according to sexual partnership and condom use. Rio de Janeiro, RJ, Brazil, 2019 (n=601)

Variables	Gender				Total		†p
	Feminine		Masculine		f	%	
	f	%	f	%			
Fixed partnership (n=546)							0.004
Yes	223	85.44	227	79.65	450	82.42	
No	37	14.18	58	20.35	95	17.4	
Uninformed	1	0.38	-	-	1	0.18	
Total	261	100	285	100	546	100	
Condom use (n=450)							0.000
Yes	103	46.19	139	61.23	242	53.78	
No	116	52.02	87	38.33	203	45.11	
Uninformed	4	1.79	1	0.44	5	1.11	
Total	223	100	227	100	450	100	
Eventual partnership (546)							0.000
Yes	96	36.78	165	57.89	261	47.8	
No	164	62.84	119	41.75	283	51.83	
Uninformed	1	0.38	1	0.35	2	0.37	
Total	261	100	285	100	546	100	
Condom use (261)							0.000
Yes	56	58.33	136	82.42	192	73.56	
No	33	34.38	25	15.16	58	22.22	
Uninformed	7	7.29	4	2.42	11	4.21	
Total	96	100	165	100	261	100	

Note: † Pearson's Chi-Square Test

Source: Prepared by the authors, 2019.

Table 3 shows the results of the verification regarding the adequacy or inadequacy of prevention practices of university students. As described in Figure 1, participants who scored zero and unsatisfactory practices with results above zero were considered to have satisfactory practices. The analysis of variance did not identify a statistically significant difference.

Table 3- Score of prevention practices of students of a public university according to gender. Rio de Janeiro, RJ, Brazil, 2019 (n=601)

Prevention practice	Gender								†p
	Feminine				Masculine				
	f	%	Average	SD [†]	f	%	Average	SD [†]	
Adequate/Satisfactory	67	24.28			117	36			
Inadequate/ Unsatisfactory	209	75.72			208	64			
Total	276	100	1.919	1.83	325	100	1.93	1.84	0.87

Note: † ANOVA test; † Standard deviation.

Source: Prepared by the authors, 2019.

Table 4 shows data on access to health services, testing for HIV and alcohol consumption. Women seek health services more frequently; there is no statistical difference in HIV testing and

alcohol consumption between the genders, but men have higher alcohol consumption before the last sexual intercourse.

Table 4 – Distribution of students at a public university according to access to public health services, HIV testing and consumption of alcoholic beverages. Rio de Janeiro, RJ, Brazil, 2019 (n=601)

Variables	Gender				Total		†p
	Feminine		Masculine		f	%	
	f	%	f	%			
Consumption of alcoholic beverages							0.358
Yes	188	68.12	234	72.00	422	70.22	
No	88	31.88	90	27.69	178	29.62	
Uninformed	-	-	1	0.31	1	0.17	
Consumption of alcoholic beverages before the last sexual intercourse							0.000
Yes	69	25.00	96	29.54	165	27.45	
No	203	73.55	228	70.15	431	71.71	
Uninformed	4	1.45	1	0.31	5	0.83	
Use of the public health care system							0.157
Yes	88	31.88	98	30.15	186	30.95	
No	106	38.41	138	42.46	244	40.60	
In part	78	28.26	84	25.85	162	26.96	
Uninformed	4	1.45	5	1.54	9	1.50	
Search for health care in the last 12 months							0.000
Yes	206	74.64	166	51.08	372	61.90	
No	67	24.28	154	47.38	221	36.77	
Uninformed	3	1.09	5	1.54	8	1.33	
Carrying out HIV testing							0.187
Yes	108	39.13	113	34.77	221	36.77	
No	163	59.06	210	64.61	373	62.06	
Uninformed	5	1.81	2	0.62	7	1.16	
Total	276	100	325	100	601	100	

Note: † Pearson Chi-Square Test

Source: Prepared by the authors, 2019.

DISCUSSION

In this study, the social characterization of the sample revealed the predominance of students aged between 18 and 24 years, which is in line with other studies conducted^{8,10} in university scenarios. In the investigated group, however, the number of students who declared skin color as black/brown is distinct from these studies. This fact may be related to the policies adopted by the university, field of study of this work, which implemented the quota system in 2000 (law n. 3.524/2000), which modified the criteria for access to state universities in Rio de Janeiro.

Regarding the use of condoms, the data converge with those presented by other national and international studies, showing that the participants of the university scenario are aware of the importance of condom use for the prevention of STIs, but its use is inconsistent in sexual relationships¹²⁻¹⁴. In addition, a study conducted in Rio de Janeiro found that young university students who have unsatisfactory prevention practices, with low condom use, have a higher perception of risk for contracting an STI⁹. The consumption of alcoholic beverages and other drugs among the university

population has also been discussed in other studies, whose results demonstrate to be a common practice in this environment and with association with risky sexual practices^{13,15}. A qualitative study with young women points out that alcohol consumption reduces social anxiety, contributes to feeling outgoing and confident, and reduces inhibitions and other barriers to sexual encounters. Women report that they are less concerned about the risks, less discriminatory towards their sexual partners and less likely to insist on safe sexual practices¹⁶.

Regarding the data on HIV testing, the results show that in both genders this procedure is low, since it may be associated with the difficulty of access by this population to health services. However, the data of this investigation show that women seek care in health services more regularly than men. Thus, there is a possibility that the low supply of HIV testing is related to both access to health services and the provision of sexual health care by health professionals. Study with 1865 university students, from an institution in southern Brazil, found that only 38% reported having been tested for HIV once in their lives, being the most common reasons for the accomplishment blood donation, health professional request or government campaigns³. This fact reinforces the need to facilitate the approach of young university students with testing services for STIs.

Health policies aimed at women are already part of the social construct. The first policies were implemented before the 1988 constitution, which established the Brazilian public health system, such as the Comprehensive Women's Health Care Program (CWHCP) created in 1984, while a policy directed to the male population group only occurred in 2008, through the National Policy of Integral Attention to Men's Health. Women's health care lines already have a long trajectory in the Unified Health System (UHS) and are well established, and, in a way, are associated with sexual health and prevention of STIs, such as the program to prevent cervical cancer, that conducts gynecological examination with a periodicity, and to reproductive planning programs and prenatal care.

Despite not being an exclusive assignment of women, care with reproductive planning and prenatal care were culturally associated with women. Even, regarding the prevention of unplanned pregnancy, women have a variety of methods at their disposal, but the same does not occur in the provision of internal condoms for the prevention of STIs. The external condom was incorporated by the SUS as a prevention strategy for STIs since 1994, but only in 2000 the internal condom began to be offered free of charge to some women in situations of vulnerability and only in 2006 was it provided to all women. However, even so, their offer is minimal due to the availability of external condoms, in addition to the internal condom being carried with taboo and low adherence by women¹⁷.

A study conducted with women, high school students, in the interior of Bahia, Brazil, shows that most participants understand that the purpose of condoms is prevention and protection, as advocated by science and health policies. However, the data suggest that the participants are more concerned with unplanned pregnancy than with the acquisition of an STI, which eventually lead them to dispense with condom use and use hormonal contraceptives. They also perform associations of internal condoms with the terms "strange" and "uncomfortable", showing a negative conception of the input, in addition to reporting lack of use¹⁸.

As long as women do not appropriate this prevention technology, men perpetuate their space of power with dominance through the use of external condoms. Despite the data presented in this investigation, other national and international studies show that condom use by men is higher than among women, and it is of fundamental importance that health education activities reframe this practice^{3,19-20}.

The difficulties of bargaining power regarding the use of external condoms, combined with unequal gender relations in our society, subject women to unprotected sexual practices. Although women give up the use of condoms, especially in stable relationships or with partners fixed, males

have more partners sexual partners, more partners in the same period and shorter beginning of sexual life, promoting the vulnerability of women in stable relations^{3,19}.

The data of this study show that there was no statistical difference in condom use between men and women in the first sexual intercourse, including both groups had use above 70%. Studies suggest that the decrease in condom use is a systematic process; it occurs with both men and women and has to do with the low perception of risk throughout sexual life, the possible “break” of the climate during sexual intercourse, confidence in the partner relationships between genders and/or use of contraceptive methods^{3,8,10,13-21}.

It should be noted that this research does not propose to question or condemn the plurality of ways of living sexuality. There is no value judgment on the beginning of sexual life - if earlier, if later, if you will have multiple partners or only one, finally, what is desired is that these ways of living sexuality are performed safely and that those involved are aware of the risks, mitigation of the consequences and equity in the offers of forms of prevention offered by the SUS. However, although most of the participants in this study recognize that condom is the best method of prevention of STIs, it is still possible to observe the association of prevention practices with fidelity, single partner, sexual abstinence, or then, confusing prevention of STIs with pregnancy, by associating contraceptives with prevention of STIs. These conceptions are socially elaborated and widely used in the past to associate promiscuity with the bad thing, such as a disease²².

Thus, thinking about coping with STIs requires recognizing how social issues have an impact on the conduct of a scenario favorable to vulnerabilities. Structural machismo is one of the phenomena that occurs in our society and that supports an order of patriarchal domination, praising values constituted as “masculine”. This system of oppression of the “female” is a producer of normative behaviors at various levels and social apparatuses, such as family, churches, media, schools, universities, fashion and the state. This system is based on a binary and dichotomous view, and all genres that escape this classification are relegated to invisibility. This hierarchical system makes it impossible to build a society with gender equity. Promoting equitable sexual health care practices requires recognizing that we live in an unjust society²³. The results of this study even reinforce the differences between the groups investigated, when women start sex life later, have fewer sexual partners throughout life, use less condoms and access more health services.

In this investigation, we replicated the study conducted in a private university in the city of Rio de Janeiro, using the same methodology to evaluate prevention practices against STI⁹. The data are similar, demonstrating that most young people, both public and private, have unsatisfactory/inadequate prevention practices. Despite the existence of studies that reinforce the exposure of young people to situations of vulnerabilities in the university scenario, universities still develop few activities in order to act as a protective factor for the students^{3,8-10}.

This study evidences data that justify the direction of educational activities in the university environment, as a policy of coping with STIs, which imposes, both women and men, vulnerabilities. In this context, it is necessary to provide activities of sexual health education and reproductive planning, offer internal, external condoms and lubricating gel, offer rapid tests for STI, verify and provide opportunities for the regularization of the vaccination situation, to evaluate referral for pre- or post-exposure prophylaxis and serve as a place of support and direction for victims of sexual, gender, racial, sexist, homophobic and transphobic violence.

Universities must assume the role of health-promoting institutions through an ethical, social and citizenship commitment to student health. The academic community should be involved in the promotion of teaching, research, extension and innovation strategies to put on the agenda the discussion and application of a care program for the health demands of its subscribed population²⁴.

This research presents as a limitation the study design that considered only one institution for data collection, however the data are similar to those of other national and international studies. Future studies should consider the implementation of intervention actions to assess whether the application of educational activities and care in sexual and reproductive health are effective with the university population. A network with other researchers and research groups is also suggested to conduct multicenter studies that collaborate in the idealization of public health policies directed to this population.

CONCLUSION

The results show that university students recognize that using condoms is the best method to prevent STIs, however the use of condoms is inconsistent in the sexual life of participants. There was no statistical difference in prevention practice between males and females and both groups had prevention practices considered inadequate/unsatisfactory. However, different behaviors and attitudes were observed between the groups.

Men start sexual life earlier, have more partners throughout life, and in the same period, and use more condoms, both with casual partners and fixed. Women seek more health services.

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