

## PERCEPTION OF THE STI RISK BY MEDICAL SCHOOL STUDENTS

---

***Ana Clara Sebba Chater***

Faculdade de São Leopoldo Mandic (SLMANDIC), Campinas, SP, Brasil. Student of Medicine

***Camila do Nascimento Guimarães***

Universidade de Ribeirão Preto (UNAERP), Ribeirão Preto, SP, Brasil. Student of Medicine

***Janaína Emerick Gerosa***

Universidade de Ribeirão Preto (UNAERP), Ribeirão Preto, SP, Brasil. Student of Medicine

***Larissa Sebba Kafuri***

Universidade de Ribeirão Preto (UNAERP), Ribeirão Preto, SP, Brasil. Student of Medicine

***Íris Ricardo Rossin***

Universidade de Ribeirão Preto (UNAERP), Ribeirão Preto, SP, Brasil. Doctorate, Counselor and Professor of Medicine

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



**Abstract:** Sexually transmitted infections (STIs) are among the most frequent public health problems in the world. This study aims to assess medical students' understanding of sexual risk behavior. An anonymous online survey was applied to 80 students from the first and last year of medical school of a medical school in the interior of São Paulo state between June 2021 and July 2021. Most of these students (77) have been sexually active. The data obtained from the questionnaires point out that in the last 12 months, less than half of these college students were using condoms in all sexual relations, 47% in the first year and 13% in the last year. The obtained results are in agreement with the findings of another study carried out in the city of Rio de Janeiro, which reports that only 45% of the university students have always used condoms in sexual intercourse. Therefore, among the STI prophylaxis methods, the reduction of risky sexual behavior, which is not limited to the use of condoms, stands out. Most of those who did not use condoms reported that they chose not to do so because they did not have knowledge of their sexual partner. The students seem to present significant risk behavior despite the comprehensive approach on diagnosis, handling and prophylaxis of sexually transmitted infections contemplated during graduation, such situation seems to be associated with the non-perception of themselves as risk subjects. Considering the presented data, it can be noticed that medical students have low adherence to the use of barrier methods as a precaution against STIs, as observed in young students from other courses and institutions. Therefore, other associated methods present in the prevention method mandala of the Ministry of Health are necessary. PreP (Pre-Exposure Prophylaxis) and PEP (Post-Exposure Prophylaxis) would be points to be highlighted.

**Keywords:** Infections; Sexually Transmitted

Infections; Medicine students.

## INTRODUCTION

Sexually transmitted infections (STIs) are ranked among the world's largest and most common public health problems. There were 357.4 million new cases in the world only in 2012. The epidemiological situation of STIs in Brazil is not well known due to a lack of studies. <sup>2</sup> The limited information on the prevalence and impacts of STIs jeopardizes the global response against these infections.

STIs are major contributors to global morbidity and mortality<sup>3</sup> and are also causes of hospitalizations, complications with profound impacts on sexual and reproductive health, decreased quality of life, impaired health of newborns, and great social and financial impact, both for affected individuals and for the country's economy. <sup>1</sup> Due to their great magnitude, transcendence, repercussion, and ease of control and prevention, STIs should be prioritized as public health problems. <sup>1</sup>

To have a greater effect on the control and treatment of these infections, greater investment is needed in prevention, identification of cases, early treatment<sup>1</sup>, in addition to the creation of therapeutic strategies and awareness through studies and dissemination of knowledge on the subject.

## THEORETICAL FOUNDATION

The paper "Sexual Health knowledge of U.S. Medical Students: A National Survey" has data showing that American students scored lower on the questionnaire regarding sexual safety and disease prevention. Similar to the results of this paper, these data show the students' lack of knowledge regarding sexually transmitted infections. In contrast to the results obtained by the other authors, the scores increased according to the medical student's year of study.

The report "Medical School Sexual Health

Curriculum and Training in the United States” describes a lack of formal sexual knowledge. When compared to this paper, the lack of risk perception for STIs is very common. Many universities and colleges have implemented prevention programs aimed at harassment and consent during sexual intercourse, however, topics such as sexual prevention and STI risks are not addressed, reports the paper “The forgotten message of STI Prevention: sexual health communication and Sexual Violence Prevention Among College Students”. The mentioned paper shows the lack of knowledge about STIs among high school students and the barriers to addressing this topic.

## RESEARCH METHODOLOGY

line (appendix 1) The present study has a cross-sectional design of descriptive and exploratory nature, without clinical or experimental intervention.

The sample was composed of 80 students who were enrolled in the first (46 students) and sixth year (34 students) of the Medical School of a private university in the interior of São Paulo in the second semester of 2021, aging 18 years or older.

In order to develop it, a questionnaire was applied on which the remote access respondent could not be identified, aiming at anonymity and greater reliability of the answers, besides guaranteeing the participants’ secrecy and security within the current pandemic context. All the individuals included as the object of the research agreed to signing the informed consent form (appendix 2).

Aiming to maintain the anonymity of those involved and a greater control over possible duplicate answers, the form with the questions was made available gradually among the participants, and the answers were made available to all. The answers were confirmed by the organizers only after a predetermined period of time.

## DATA ANALYSIS

Eighty medical students attending the first year (stages 1 and 2) and sixth year (stages 11 and 12) responded to the questionnaire. 76.3% of the participants were female, 72.6% were older than 19 years old (86.4%), and most of them (96.3%) were sexually active; only 5% had previous higher education.

Most of the respondent volunteers (53.8%) reside alone. Most of the student respondents (77.5%) had per capita income above 5 minimum wages. Regarding sexual partnership we observe in chart 1 that the majority (86.3%) were heterosexual, of 10% were homosexual, and for 3.7% the partnerships were of both sexes.

As for sexual partnerships, 55% of the college students had sexual relations in the last 12 months only with a regular partner, 20% with a casual partner, 17.5% only with casual partners, and 7.5% had no sexual relations.

Chart 2 shows that less than 35% of the participants who used condoms during all sexual relations did so, while 12.5% did so on more than half of the occasions and 7.5% did so on up to half of the occasions. 25% of the respondents emphasized that they would have sexual relations regardless of condom availability, while 26.3% would only do so with the use of a condom. Among those who used condoms, 30% did so because they recognized it as an effective method against contamination by STIs, and 41.3% to avoid unwanted pregnancy. For 35% of the students, the main reason for abandoning its use in some occasion was the previous knowledge of the partner’s sexual history, the minority (11.3%) said they were not prepared for the occasion and 17.5% could not explain the reason.

In Chart 3, it can be observed that although all the students recognize the possibility of STI transmission via the vaginal route and most also list the oral and anal routes (96.3%),

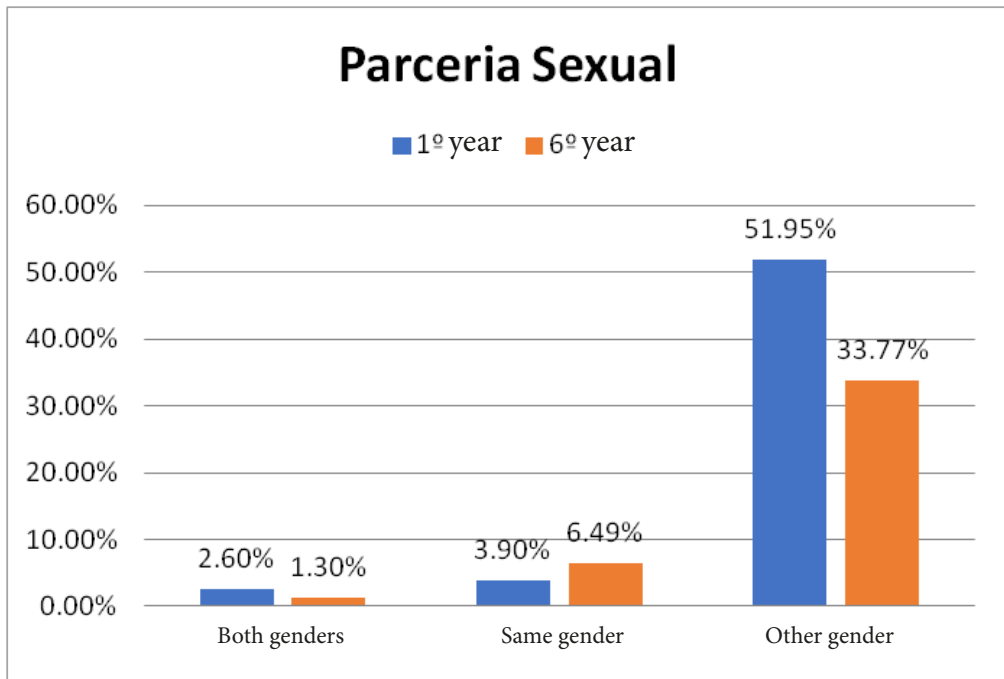


Chart 1: Answers referring to sexual partnership.

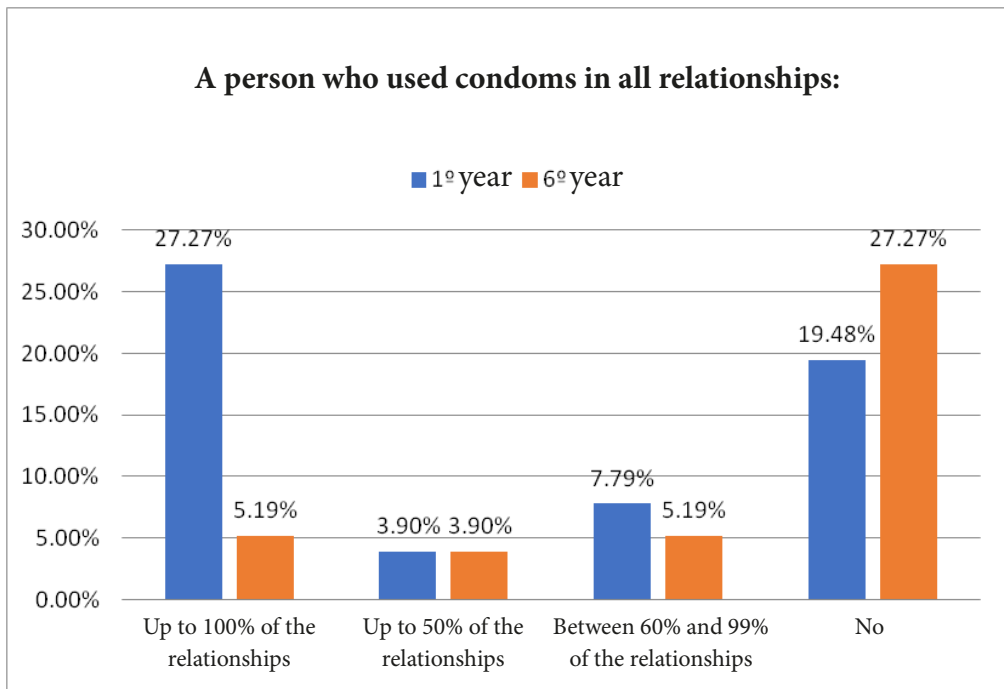


Chart 2: Responses referring to the use of condoms in sexual relations.

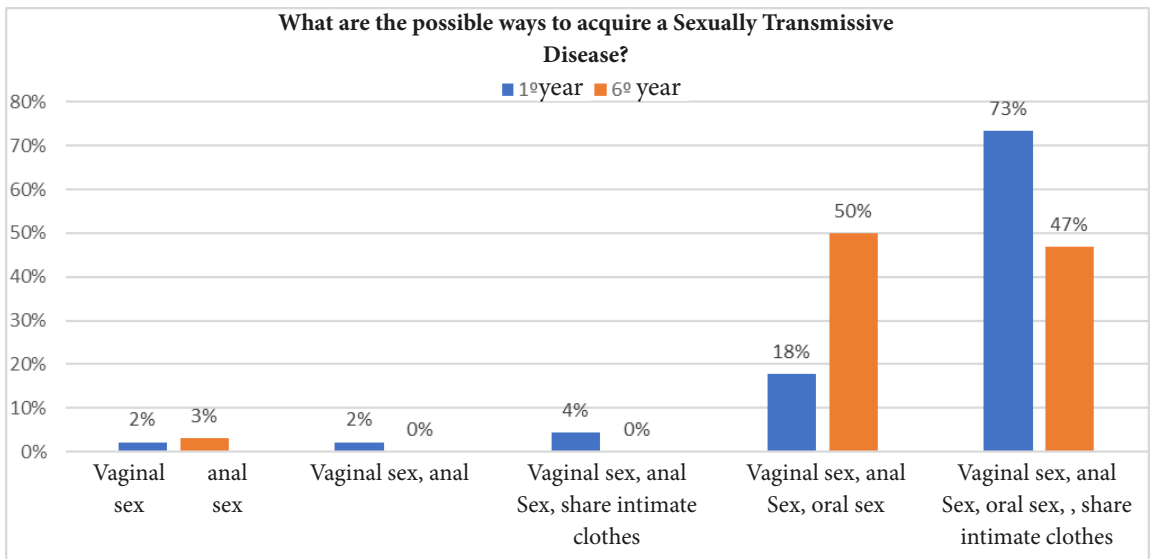


Chart 3: Responses referring to the possible forms of condom use in sexual relations.

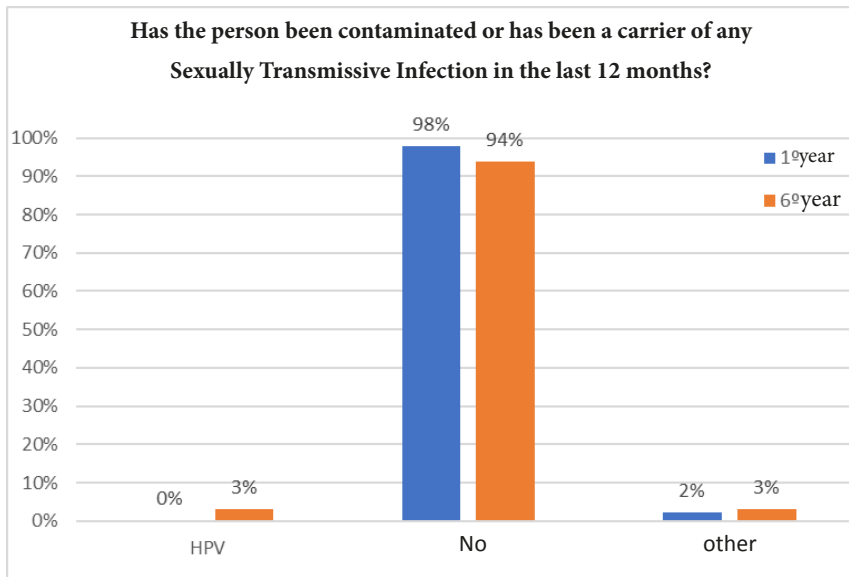


Chart 4. Responses referring to contamination or being a carrier of some STI in the last 12 months.

besides sharing underwear (65%) as methods, 11.3% believe that there is no possibility of contamination with an STI if they have sex without using a condom. On the other hand, 31.3% perceive the risk as 50% and the majority (32.5%) believe that the chance of contamination is only 20%. A considerable number of the students (28.7%) consider that friends in the same situation would have an 80% probability of being contaminated.

Chart 4 shows that 3.7% of the participants were contaminated by some STI in the last 2 months, with 1.3% corresponding to the Human Papillomavirus (HPV) and 2.5% to another unspecified disease, while the majority (96.3%) said they had not been contaminated. When asked about the probability of cure for the Acquired Immunodeficiency Syndrome (AIDS), 81.3%, pointed out the existence of a treatment, but with no perspective of cure and 6.3% understood that there is no cure.

## **FINAL CONSIDERATIONS**

According to the presented data, it is evident that medical students do not consider themselves as risk subjects and tend to have low adherence to the use of preventive methods as a precaution against STIs, a common pattern observed in other studies. This research shows that the students who answered the questionnaire do not perceive themselves as being at risk and have a high incidence of exposure to STIs. Therefore, the strengthening of risk perception awareness and adequate knowledge of the prevention method mandala of the Ministry of Health is necessary. In addition, PreP (Pre-Exposure Prophylaxis), PEP (Post-Exposure Prophylaxis), Hepatitis Virus (HBV) and Human Papillomavirus (HPV) vaccination, routine testing for STIs, prevention of mother-to-child transmission, and condom use would be key points to be highlighted. The greater focus on teaching therapy rather than prophylaxis becomes

clear with the comparison that more than 90% of these students demonstrated adequate knowledge regarding the possibilities of treatment and cure of HIV/AIDS. It can be concluded that the transformation of theoretical knowledge into practical attitudes ought to be contextualized and applied as part of the foundation of knowledge.

## REFERENCES

- Almeida, Rebeca Aranha Arrais Santos et al. **Knowledge of adolescents regarding sexually transmitted infections and pregnancy**. Revista Brasileira de Enfermagem [online]. 2017, v. 70, n. 5, pp. 1033-1039.
- Aragão, Júlio César Soares, Lopes, Claudia de Souza e Bastos, Francisco Inácio **Comportamento sexual de estudantes de um curso de medicina do Rio de Janeiro**. Revista Brasileira de Educação Médica [online]. 2011, v. 35, n.
- Brêtas JRS, Ohara CVS, Jardim DP, Muroya RL. **Conhecimentos de adolescentes sobre doenças sexualmente transmissíveis: subsídios para prevenção**. Acta Paul Enferm [Internet]. 2009.
- Chinazzo, Ítala Raymundo, Câmara, Sheila Gonçalves e Frantz, Deise Gabriela **Comportamento sexual de risco em jovens: aspectos cognitivos e emocionais**. Psico-USF [online]. 2014, v. 19, n. 1
- Freitas KR, Dias SMZ. Percepções de adolescentes sobre sua sexualidade. Texto Contexto Enferm [Internet]. 2010.
- Oliveira KNS, Bezerra MAR, Rocha RC, Santos LR, Saraiva PVS. **Educação sexual na adolescência e juventude: abordando as implicações da sexualidade no contexto escolar**. Sonare [Internet]. 2013.
- Paiva, Vera et al. **Idade e uso de preservativo na iniciação sexual de adolescentes brasileiros**. Revista de Saúde Pública [online]. 2008, v. 42, suppl 1
- PINTO, et al. Fatores associados às infecções sexualmente transmissíveis: inquérito populacional no município de São Paulo, Brasil, 2016.
- SAÚDE, Ministério da. **MANUAL DE BOLSO CONTROLE DAS DOENÇAS SEXUALMENTE TRANSMISSÍVEIS DST**. 2. ed. Brasília: Ministério da Saúde, 2006.2.
- Silva AF, Guimarães GL. **The brazilian teenagers and the reasons why they don't use condom to prevent HIV/Aids**. REV Enferm UFPI [Internet]. 2015.
- VERONESI, Ricardo; FOCACCIA, Roberto. **Tratado de Infectologia**. 5. ed. São Paulo: Atheneu, 2015.
- WHO. **Global health sector strategy on Sexually Transmitted Infections, 2016-2021**. Geneva: World Health Organization, 2016.