

Original article

## Social representations of sexually transmitted infections and prevention among young female university students

Representações sociais sobre as infecções sexualmente transmissíveis e a prevenção de jovens universitárias

*Representaciones sociales sobre las enfermedades de transmisión sexual y la prevención de jóvenes universitarias*

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### Abstract

**Objective:** to analyze the content of social representations about sexually transmitted infections (STIs) and prevention practices among young female university students. **Method:** a qualitative study based on the Theory of Social Representations and a procedural approach. Conducted in 2021 with 80 undergraduate female students from a public university in Rio de Janeiro, they completed a form to collect social data, sexual practices, and infection prevention, and a semi-structured interview. The data were analyzed using the content analysis technique. **Results:** in the group, 26.2% used condoms with regular partners and 17.5% with casual partners. Young women recognize some STIs and the importance of prevention practices for these infections, but they display vulnerable sexual behavior. **Conclusion:** young women's social representations of STIs are anchored in biomedical knowledge; however, the group's prevention practices are modulated by affective relationships.

**Descriptors:** Primary Prevention; Sexually Transmitted Diseases; Social Representation; Women's Health; Sexual Health

### Resumo

**Objetivo:** analisar o conteúdo das representações sociais sobre as infecções sexualmente transmissíveis (ISTs) e as práticas de prevenção de jovens universitárias. **Método:** estudo qualitativo, com suporte na Teoria das Representações Sociais e abordagem processual. Realizado com 80 graduandas de uma universidade pública do Rio de Janeiro em 2021, que responderam a um formulário para captação de dados sociais, práticas sexuais e prevenção das infecções e uma entrevista semiestruturada. Os dados foram analisados com o emprego da técnica de análise de conteúdo. **Resultados:** no grupo, 26,2% utilizavam preservativos com parceiros fixos e 17,5%, com parceiros casuais. As jovens reconhecem algumas ISTs e a

importância das práticas de prevenção dessas infecções, mas assumem um comportamento sexual vulnerável. **Conclusão:** as representações sociais das jovens sobre as ISTs estão ancoradas no conhecimento biomédico, entretanto as práticas de prevenção do grupo são moduladas pelos relacionamentos afetivos.

**Descritores:** Prevenção Primária; Infecções Sexualmente Transmissíveis; Representações Sociais; Saúde da Mulher; Saúde sexual

## Resumen

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**Objetivo:** analizar el contenido de las representaciones sociales sobre las enfermedades de transmisión sexual (ETS) y las prácticas de prevención de jóvenes universitarias. **Método:** estudio cualitativo, basado en la Teoría de las Representaciones Sociales con enfoque procedimental. El estudio se llevó a cabo con 80 estudiantes de una universidad pública de Río de Janeiro en 2021, que respondieron a un formulario para la recopilación de datos sociales, prácticas sexuales y prevención de infecciones, y a una entrevista semiestructurada. Los datos se analizaron mediante la técnica de análisis de contenido. **Resultados:** en el grupo, el 26,2 % utilizaba preservativos con parejas estables y el 17,5 % con parejas ocasionales. Las jóvenes reconocen algunas ETS y la importancia de las prácticas de prevención de estas enfermedades, pero adoptan un comportamiento sexual vulnerable. **Conclusión:** las representaciones sociales de las jóvenes sobre las ETS se basan en el conocimiento biomédico, sin embargo, las prácticas de prevención del grupo están moduladas por las relaciones afectivas.

**Descriptores:** Prevención Primaria; Infecciones de Transmisión Sexual; Representaciones Sociales; Salud de la Mujer; Salud Sexual

## Introduction

Sexually Transmitted Infections (STIs) are transmitted primarily through sexual contact (oral, vaginal, anal), without the use of a condom (male or female), with an infected person. Transmission can also occur vertically (from mother to child during pregnancy, childbirth, or breastfeeding), through non-sexual means, through contact of mucous membranes or non-intact skin with contaminated bodily secretions, and eventually through the bloodstream. These infections, caused by bacteria, viruses, protozoa, or fungi, affect people of all ages and genders.<sup>1</sup>

The incidence of STIs, in general, has increased among young people. However, they are still perceived as less of a concern, considering that they are infections that can be treated with medication, which minimizes their impact. This view, however, ignores the risks associated with these infections, which include infertility, pregnancy complications, and increasing antibiotic resistance, as seen in strains of gonorrhea that are becoming more difficult to treat.<sup>1-2</sup>

In Brazil, the Youth Statute establishes that individuals between the ages of 15 and 29 are considered young. The World Health Organization (WHO) adopts a slightly

more restrictive definition, defining youth as the period from 15 to 24 years of age.<sup>3</sup> Youth brings social, psychological, and biological challenges, often coinciding with sexual initiation and new experiences, increasing vulnerability to STIs. The university environment encourages risky behaviors such as alcohol and drug use and sexual encounters, increasing the chances of unprotected sex. According to the WHO, some population groups, such as young people and adolescents, are vulnerable to STIs due to the risks associated with gender inequalities and exposure to violence.<sup>4</sup>

Young people require attention to their sexual health, given their vulnerability to STIs. Regarding STIs, it is estimated that 1 million new cases of only four curable infections occur worldwide every day among people aged 15 to 49, which is equivalent to more than 376 million new cases of chlamydia, gonorrhea, trichomoniasis, and syphilis.<sup>5</sup>

Epidemiological data from the United States indicate that two-thirds of all chlamydia cases and more than half of gonorrhea cases occur in people between the ages of 15 and 24. Regarding syphilis, more than 64% of primary and secondary syphilis cases occur in individuals between the ages of 15 and 34. In Brazil, it is estimated that 10 to 12 million infections of chlamydia, gonorrhea, trichomoniasis, and syphilis occur each year, with 25% of cases being diagnosed in the population of young people up to 25 years old.<sup>5</sup>

Between 2007 and June 2024, 541,759 cases of HIV infection were reported in the Notifiable Diseases Information System (NDIS) in Brazil. The occurrence of new HIV infections in women of reproductive age (15 to 49 years) represented 77.7% of the total female cases.<sup>6</sup>

Vulnerabilities related to social determinants of health, such as level of education, ethnicity, socioeconomic conditions, family structure, social groups, and gender issues, constitute threats to the health of the young population and influence the early onset of sexual life, exposure to infections and diseases, especially HIV and Acquired Immunodeficiency Syndrome (AIDS).<sup>7</sup> As of November 2017, there were 656 reports of hepatitis A. Of these cases, 87% were male, 80% were between 18 and 39 years old, and 45% of cases were acquired through unprotected sexual contact. Regarding syphilis, reports in Brazil have been showing an increasing trend in the younger population, aged 13 to 29.<sup>8</sup>

It is understood that early sexual initiation increases young people's vulnerability to STIs due to the lack of information about the modes of exposure to infections and the prevention of these diseases.<sup>7</sup> It is believed that access to information about STIs can influence adherence to preventive methods, being a relevant aspect for reducing morbidity in this group. Research on women's vulnerability to STIs/AIDS found that this social group had a low perception of risk, felt protected, and did not regularly use condoms during sexual activities, due to their trust in their partners.<sup>9</sup>

The idea that a stable romantic relationship represents security for the couple often associates not using condoms with trust in one's partner. For some young people, using condoms with steady partners denotes suspicion of infidelity, in addition to the belief that using this resource diminishes sensitivity and pleasure.<sup>3</sup> It is known that young people often find it difficult to talk about sexuality and preventive practices with their families and at school. Educating this group about the importance of condom use and the implications of using them irregularly (or not using them at all) is essential, regardless of whether they are sexually active or not. This dialogue is fundamental to overcoming taboos associated with sexuality and reducing young people's vulnerability to sexual health risks, such as STIs.<sup>8</sup>

When it comes to condoms, young women face certain barriers and challenges in relation to their use and negotiation in their relationships. This scenario may reflect female subordination to male desires and places young women at a disadvantage in negotiations, exposing them to the risk of unplanned pregnancy and STIs.

Social Representations Theory (SRT) can provide a framework for understanding a social group's perceptions and behaviors related to STIs. Serge Moscovici, the social psychologist who developed SRT, understands that social representations (SR) arise from common sense through interpersonal interactions between groups and their social behaviors. SRT focuses on the subject-object relationship and the construction of collective knowledge. The role of social interactions, communication, and shared knowledge in shaping individuals' perceptions and responses to various phenomena, such as those related to health, is valued by the author mentioned above.<sup>10</sup> The contribution of SRT is therefore relevant for understanding how a social group, such as young female university students, constructs concepts related to STI prevention practices.

In this context, this article aims to analyze the content of social representations about sexually transmitted infections (STIs) and prevention practices among young female university students.

## Method

Qualitative study, supported by SRT in its complementary procedural approach, developed by Denise Jodelet. In this theory, individuals construct and share knowledge about the social world, attributing meanings to common objects, situations, and concepts. Representations are shaped by social, cultural, historical, and psychological influences and play a significant role in the perception and interaction of people with reality.<sup>11</sup>

In Denise Jodelet's understanding, social representations have five fundamental characteristics: they are always representations of objects; they have an image-based character and the capacity to exchange sensations and ideas, perceptions and concepts; they are symbolic and significant; they are constructive; they have autonomy and creativity.<sup>11</sup>

The data used in the parent study to which this study is linked were collected at a higher education institution located in the city of Rio de Janeiro, Brazil. This institution has campuses in eight cities in the state of Rio de Janeiro, offering approximately one hundred undergraduate programs, with approximately 35,000 students enrolled in undergraduate and graduate programs. It is worth noting that the database of the main research contains quantitative information (social group characterization data) and qualitative information (interviews) of students of both genders.

The participants in this study were 80 female students, aged between 18 and 29 years, included in the group of young people as defined by the Youth Statute (Decree-Law No. 12,852/2013). The inclusion criteria for this research were: students regularly enrolled in the institution's undergraduate courses, aged between 18 and 29 years, who were sexually active and present at the institution during data collection. Two instruments were used to collect data: a form for social characterization, sexual practices, and STI prevention, and a semi-structured interview.

Data for this research were collected in 2021, including students from various programs. Given the COVID-19 pandemic and the need for social isolation, the institution hosting the research was holding virtual classes at the time. Therefore, data collection took place virtually. Sociodemographic data were collected using a Google Forms form, and Google Meet was used for interviews.

The students were invited to participate in the survey through social media platforms such as Facebook and Instagram, among others. Those who agreed were sent a link to a Google Forms questionnaire containing the Free and Informed Consent Form (FICF) and the survey questions. The questionnaire was completed by 80 students, and the interviews were conducted with 30 female university students. The data collection team consisted of a scientific initiation scholarship holder, a master's student from the Graduate Nursing Program, and undergraduate nursing students from the host institution. Training for conducting the interviews was provided by the research coordinator. Three pilot interviews were conducted to test the instrument, and adjustments were made to the script. The interviews lasted an average of 30 to 40 minutes and were recorded using an electronic device, with the participants' prior permission.

Considering that this research used the procedural approach of SRT, the recommended number of participants for conducting studies using this theoretical framework was respected, that is, 30 participants. Thirty students who were part of the sample in the first stage were invited to participate in the semi-structured interview; however, it was also necessary to use the Snowball technique, which consists of recruiting participants through contact networks. In this way, the interview participants helped to locate other people with the necessary profile for the research and so on, so that the researcher could reach the desired number of respondents.<sup>12</sup> It should be mentioned that all undergraduate students invited agreed to participate in the study.

The variables included in the form were: age, marital status, relationship status, cohabitation, self-declared skin color, sexual orientation, sexual practices, and STI prevention practices, totaling 19 questions. The semi-structured interview was conducted based on a script with thematic axes, addressing sexual practices, emotional relationships, knowledge about STIs, modes of transmission, preventive measures, and

adherence to practices for preventing infections. In this research, the expression “sexually transmitted disease” was adopted because it is more recognized by the general population, to facilitate the understanding of the participants.

Data processing occurred in two stages. The information from the form was entered into Excel software and analyzed using descriptive statistics and the Statistical Package for the Social Sciences (SPSS) software. In the second stage, the discursive data obtained in the interviews were transcribed, organized, and stored in Microsoft Word 2007 software and analyzed using the thematic-categorical content analysis technique.<sup>13</sup> This analysis covered the following stages: pre-analysis, exploration of the material, processing of results, inference, and interpretation.

The analysis process encompassed: an exhaustive reading and organization of the material; identification of the recording units (RUs), highlighting the most relevant excerpts for analysis; determination of the meaning units (MUs) or themes; quantification of the MUs across the different corpora; construction of analytical categories; naming and quantification of the categories, as well as the description and discussion of the categories that emerged from the data.<sup>13</sup> The choice of identifying the students as “P1”, “P2”, and so on was made to preserve their real names and translates as “participant”, with the numbering according to the order in which the interviews were conducted.

All ethical aspects described in Resolutions No. 466/2012 and No. 510/2016 of the National Research Ethics Commission were respected. It is worth noting that, since 2024, Law No. 14,874, which establishes the National System of Ethics in Research with Human Beings, has also been in force, reinforcing and consolidating the current regulatory framework for research ethics in the country. The research was reviewed and approved by the Research Ethics Committee. Participants were informed about the research and signed the FICF. The study was approved under Opinion No. 3,316,944 on May 9, 2019.



## Results

Eighty female university students participated in the study. The majority of the students were between 18 and 23 years old (68 – 82.5%), and less than half reported not having a boyfriend or steady partner, 39 (48.7%).

Regarding sexual practices, 41 (51.2%) reported using condoms in all sexual relations. Among the students who had sexual relations with a regular partner in the last 12 months (56–70%), only 21 (26.2%) reported always using condoms. Among those who had casual partners in the last 12 months (33 – 41.2%), only 14 (17.5%) reported regularly using this method during sexual intercourse.

In the analysis of the discursive data, 931 recording units (RUs) were identified, distributed across 66 meaning units. These units were grouped, resulting in four categories: female university students' knowledge of sexually transmitted infections; the image students associate with sexually transmitted infections; sexually transmitted infection prevention practices adopted by female university students; and the disuse of condoms in sexual relationships and the motivation for this practice.

### Knowledge of female university students about sexually transmitted infections

This category comprises the knowledge and concepts associated by young female university students with STIs and represents 28.1% of the corpus analyzed, with 262 RUs.

*[We can acquire] through sexual intercourse without using a condom. (P8)*  
*These are diseases that can be transmitted during sexual intercourse [unprotected sex]. (P13)*  
*[...] taking proper precautions, being careful with your partner, and having routine checkups. (P3)*  
*[...] using condoms, in the case of a woman, individually. Men, too, can have sex with condoms. Getting tested regularly to find out if they are HIV-positive [if they have tested positive for any infection]. (P7)*  
*[...] I know them as sexually transmitted infections too, but I understand that we still need to use the term STD, because the population that is not in the health field or studies about this cannot see it in the same way. (P20)*  
*These are diseases transmitted through sexual intercourse without the use of a condom [...] Ah, HIV, syphilis, death. (P28)*  
*Diseases caused by sex without prevention [...] I associate them with injuries, lesions, getting sick. (P10)*

### Image associated by students with sexually transmitted infections



This category presents images associated by female university students with sexually transmitted infections. It represents 10.4% of the total corpus studied, with 97 RUs. Most students associate STIs with suffering, infected people, wounds, skin manifestations, and genital warts.

*I believe that venereal diseases, the really serious ones, were always those images of penises and vaginas with pus and infection, odor. (P11)*

*[...] what comes to my mind are the images about the disease itself, for example, warts on the genital area. (P24)*

*[...] The first thing I think about when it comes to STDs, [I think] it's AIDS and HPV too. (P2)*

*[...] [when I think of STDs, I associate them with] syphilis, HIV. (P6)*

*We have two images: the one that initially shows no symptoms or apparent signs, and the one that ends up showing symptoms and signs. Where you see the diseases manifesting through the skin, the cutaneous part. (P23)*

*Redness, pustules, secretions. (P13)*

In the group investigated, 18 female university students associated the use of condoms with STIs, indicating that they have some information about these sexual health problems and the importance of prevention.

*I have the image of the person putting on the condom. (P21)*

*I think the image of a condom doesn't stray too far from that. (P22)*

*The image of condoms and things like that immediately comes to mind. (P25)*

Sexually transmitted infection prevention practices adopted by young female university students

This category presents the sexually transmitted infection prevention practices adopted by young women, accounting for 40.8% of the total corpus studied and 380 RUs. This category had the greatest representation in the analyzed data set and favored the participants' discourse when verbalizing the preventive practices adopted in their daily lives. The STI prevention method most mentioned by female university students was the male condom. Some reported immunization against HPV and hepatitis, in addition to seeking information from a healthcare professional.

*[...] seeking [information and guidance] directly like that, no. I think I only talked to my gynecologist about HPV once, but she advised me to get the vaccine. (P2)*

*I only use [the] condom, I've never done anything other than look for it [She doesn't use other means to prevent STIs]. (P4)*

*I use condoms [to prevent STIs]. (P13)*

*I [to prevent STIs] do routine exams, routine blood counts, and preventive tests. I think that's it, preventive tests and blood tests. (P6)*

*[I protect myself by getting immunized] they [HPV and hepatitis vaccines] are all*

*up to date. (P13)*

*I go to any doctor, every doctor, to see if everything is okay [with my health]. (P1)*

The disuse of condoms in sexual relationships and the motivation for this practice

This category has 192 RUs, representing 20.6% of the study corpus, and with 12 meaning units. It portrays the disuse of condoms and the reasons that lead young female university students not to use this method, due to trust in their partner, discomfort/inconvenience in adopting this method, among others.

*If I didn't date, I would always use [condoms], since I date, I don't use them. (P1)*

*I think it was the safety issue with him. Yes, it influenced me. In a way, I thought, "If he's my boyfriend, why use a condom?" (P7)*

*[...] With a steady partnership, I feel more relaxed, and with a casual one, I don't feel so relaxed because I know that both she and I can be in relationships with other people. (P27)*

*[...] and the fact that the edge hurt me a lot, I didn't feel completely comfortable. (P3)*

*To be quite honest, I don't like using it, it bothers me, maybe it's something in my mind, but I don't like using it. (P17)*

*I thought that using a birth control pill was enough [to prevent STIs]. (P13)*

*I don't usually use condoms because I've been with the same partner for 12 years, but I've used them on other occasions. (E30)*

The results allowed us to understand that information about STIs, the means of transmission, and prevention practices for these diseases are relevant and should be disseminated among the population, due to the high number of cases among women. For female university students to have healthy sexual habits, they must have greater access to information about self-care, means of exposure to infections, and prevention methods, such as vaccines, situations of vulnerability, and early detection of STIs.

## **Discussion**

The university students' testimonies reveal significant contradictions and challenges in the social representations of STIs and their prevention methods among young female university students. The findings indicate that, although more than half of the participants (51.2%) recognize condoms as an essential preventive method for STIs, this understanding does not translate into ongoing prevention practices in daily life. The participants in this study cited discomfort/inconvenience as a motivation for not using condoms.

This discrepancy reinforces an aspect discussed in the literature: formal knowledge does not always guarantee the adoption of effective preventive behaviors.<sup>14</sup> Many young people do not know how to adequately distinguish between contraceptive methods that prevent an unplanned pregnancy, such as contraceptives, and those that prevent STIs and pregnancy, such as condoms.<sup>7</sup>

The students in this study reported that they often do not use condoms when using the birth control pill and that they often use this method to prevent unwanted pregnancy, which is their main concern. These findings corroborate those of other studies, indicating that, although participants recognize their vulnerability to STIs, they still consider pregnancy to be the most dangerous consequence of unprotected sex.<sup>15-16</sup>

Although the interviewees stated that trust in their partner is a determining factor in the decision to use a condom or not, this trust is often built based on idealized expectations and not on concrete information about the partner's sexual history, which can put young women at real risk. Studies indicate that relationships with casual partners, generally characterized by low emotional involvement and little mutual trust, tend to favor condom use. Longer, more stable relationships, in which partners become regular, present greater emotional involvement and trust, which results in the decision not to use condoms during sexual relations.<sup>16</sup> This perception reinforces one of the challenges of prevention: the emotional and relational dimension that influences choices and cannot be ignored.

Young women, although they recognize the importance of using condoms during sexual relations, tend to adopt vulnerable sexual behavior when they are in a stable relationship, as they trust in the stability of the relationship and the sexual partnership, as demonstrated by the quantitative data. This connotation of female submission to men's decisions leaves them in an unequal position to negotiate and exposes them to unplanned pregnancies and STIs. Gender issues associated with inequalities, such as poverty and discrimination based on ethnicity and race, are factors that can contribute to women's vulnerability.<sup>7</sup>

Discomfort is a factor attributed to young women not using condoms, and this practice is not associated with financial resources. In addition, there is a belief that sex without a condom is more pleasurable, which is one of the obstacles preventing

young women from using condoms, whether with a steady partner or not. Understanding that the continued use of this method is important and should be adopted continuously in sexual practices to avoid exposure to STIs is fundamental.<sup>17</sup> In the health context, SRT provides clarification on the behaviors adopted by individuals and helps in understanding the reality experienced in their daily lives, revealed in their speeches and practices.

Studies have found that women feel uncomfortable carrying condoms in their purses for fear of being negatively judged.<sup>3,5</sup> For this reason, they often transfer the responsibility for possessing this method to the man. Female condoms are not always available for distribution in public services or for purchase in pharmacies, and they are more expensive; women may have difficulty using them. A survey of university students of both genders found low adherence to condom use with both regular and casual partners, consistent with the results of this study.<sup>18</sup>

Research conducted in Nigeria with 600 female university students asserts that the main reasons for not using the female condom were the unavailability of the method, the difficulty of insertion, and the discomfort caused, which is in line with the findings of this study. The desire to find a serious relationship was one of the reasons given by female university students for using this device.<sup>17</sup> Women have difficulty negotiating the use of condoms, male or female.<sup>17,19</sup>

According to the female university students, STIs are not just a health problem; they also involve fear, shame, and social stigma. They recognize STIs as a real threat to their health and know that prevention involves condom use. Trust in sexual partners, however, is often more significant than information about risks and contributes to the vulnerability of this group. These feelings and meanings shape their representations. Fear of the disease intertwines with the concern about being judged or stigmatized and directly influences prevention and care practices.

The SR of female university students regarding STIs and prevention practices is aligned with the concept developed by the author, in that “a social representation is an organized and structured set of information, beliefs, opinions, and attitudes; it is a particular sociocognitive system [...]”.<sup>23:38”20</sup>

When young people enter university, their sexual behavior may be influenced by different factors, such as new friendships and interacting with people with different lifestyles, in addition to the feeling of freedom and autonomy that the university environment provides. The lack of access to safe information, the absence of discussions in appropriate environments such as universities, and the early initiation of sexual activity are described as factors that increase the chance of acquiring HIV among young people.<sup>18,21</sup>

In this context, the university emerges as a strategic space for the formation of ideals and values that go beyond the mere transmission of information. It is through academic experiences that young women can be encouraged to critically reflect on the social representations they hold, questioning prejudices and constructing new meanings about STIs and their prevention. Thus, higher education institutions play a fundamental role in promoting an education that combines scientific knowledge, social awareness, and collective responsibility, contributing to the transformation of practices and the reduction of vulnerabilities in this field.<sup>18</sup>

It should be noted that SR is shaped by a range of influences, including historical, cultural, social, economic, political, and ideological factors, as well as symbolic elements, beliefs, and traditions. Aspects such as gender, race, and social class also emerge, enabling other meanings to be attributed to youth in a superficial manner and subject to debate.<sup>4,22</sup> Social representations are responsible for guiding behaviors and reshaping the elements of the environment in which they occur. It is understood that young university students have their own social representations, that is, they develop new meanings and reconstruct thoughts and behaviors that stem from the common sense associated with the reified universe.<sup>18,23</sup>

It is known that young men tend to initiate sexual activity earlier than women; they do not use any method to prevent STIs and, therefore, have a greater risk of exposure to infections. Furthermore, the association of sexual practices with the abusive consumption of alcoholic beverages, smoking, or even the use of illicit drugs leads both genders to adopt vulnerable behaviors, such as unprotected sex.<sup>19,24</sup>

The findings reveal that young women recognize STIs as infections transmitted during unprotected sex. However, they still face challenges in adopting an assertive stance regarding their sexual and reproductive health choices. This aspect is intrinsically linked to female empowerment, the ability to make independent decisions, and the pursuit of gender equality. Therefore, it is important to disseminate negotiation strategies, appropriate for each group, that increase the likelihood of women adopting condom use.<sup>25</sup>

The results highlight the complexity of social representations about STIs and prevention, marked by formal knowledge, affective beliefs, and cultural and media influences, which do not always converge towards effective prevention practices. Discussing these contradictions is fundamental to developing approaches that go beyond the limits of technical knowledge, incorporating the subjective and social dimensions that permeate the experiences of young female university students.

The findings show that stigma still permeates representations of STIs, interfering with the search for information and access to health services. Fear of judgment and the association of STIs with “inappropriate” behaviors result in silencing and omission, which hinders not only prevention but also early diagnosis and treatment. This aspect highlights the urgency of public policies and educational actions that promote the demystification and confrontation of prejudice.<sup>25</sup>

Given the vulnerability of young women to STIs, it is important to implement health education and disease prevention measures for this group. Sex education is essential to change misconceptions and promote the use of preventive methods. Health professionals must encourage autonomy in the construction of knowledge and health of the social group with flexible strategies that are sensitive to the individualities and culture of that social group.<sup>18,21</sup>

In the young women's reports, the most frequently mentioned preventive method was the male condom, and they also mentioned routine checkups and seeking medical care. Other preventive methods, such as immunization, were mentioned by only two participants. The other undergraduate students do not adopt this practice. It should be added that the combined prevention model, recommended by the Ministry of Health, highlights methods such as condoms, regular check-ups, immunization, among others,

as important practices for preventing STIs according to the person's circumstances and living conditions.<sup>8</sup>

Possible variations between social representations and practices may occur due to social pressures, and may present several facets, some of which are not always expressed in all circumstances. Some more sensitive issues, such as STI prevention, which are intensely permeated by social values and norms, may not reveal the full content of their representation in certain situations.<sup>20</sup>

It is understood that, when evaluating the relationships between representations and practices, there is a tendency to believe that there would be a direct correspondence between what the group thinks/knows about the object and the practices adopted. However, representations present themselves as a condition of practices, and these relationships are not symmetrical.<sup>26</sup>

It is believed that it is essential for young people to have access to information about STIs and to know that the Unified Health System (*Sistema Único de Saúde, SUS*) provides free treatment for these conditions. The SUS offers three doses of the hepatitis B vaccine to everyone and the HPV vaccine to pre-adolescents and adolescents as part of routine immunization, believing they are most effective before sexual contact. Regular monitoring by a qualified health professional is also recommended, and, in the case of women, regular gynecological care and a Pap smear test.<sup>25,22</sup>

The family health strategy (FHS) represents the public's first contact with the health system, as it is closer to the individual's home and social context. Early diagnosis and treatment of STIs reduce the number of new infections, complications, and sequelae. It is important that FHS professionals have knowledge about STIs and provide appropriate guidance in a welcoming environment for users.<sup>27</sup>

It is believed that tackling STIs requires integrated action across the entire healthcare network, from primary care to specialized services, to ensure access to information, early diagnosis, appropriate treatment, and the support needed to minimize the impact of these infections. This collective accountability of the network is essential to overcome the challenges and contradictions highlighted by the young women themselves, who live with fear, stigma, and uncertainty regarding STIs.<sup>8</sup>



Considering that the social representation of STIs and the prevention practices of university students involve social and cultural aspects of the group, it is clear that the representations may be anchored in knowledge disseminated in educational and health spaces and in public campaigns regarding infections, since the young women demonstrate some understanding of the topic. However, trust in partners and the type of emotional relationship end up shaping sexual practices and interfere with adherence (or not) to preventive practices.

The study was limited by the fact that it was conducted during the COVID-19 pandemic, due to the difficulty in recruiting participants for data collection and the need for social isolation. Therefore, it was necessary to use virtual resources, such as Google Forms and Google Meet, to access the university students and collect data.

It is believed that this study contributes to better provision of assistance to women, with dialogue about STIs, helping in the training of health professionals with a close eye on this issue, with the possibility of transforming the care space into a continuous process of collective construction. Research can contribute to teaching in the university setting, with reflections on the dimensions and contents of the SR of young female university students about STIs, in learning about safer sexual practices and reproductive health care. Regarding research, the study provides information and knowledge about STIs and vulnerabilities among young women, care practices, and information about infections, modes of transmission, and prevention of these diseases.

## **Conclusion**

The students are aware of the transmission and prevention of STIs, but engage in vulnerable sexual behavior in that they do not use condoms consistently, due to discomfort and trust in their sexual partners. The female university students' understanding of STIs is based on biomedical knowledge and modulated by emotional relationships, which makes it difficult for them to adhere to preventive methods.

The young women's social representations of STIs were expressed in knowledge about STIs (cognitive dimension), feelings and attitudes related to the topic (affective/attitudinal dimension), images associated with infections (imagery dimension), and were objectified by the prevention practices that some young women adopt

(practical dimension), with the use of condoms and sexual health care practices (visits to the gynecologist, routine exams and immunization).

Health education initiatives need to be implemented in different settings, reinforcing safer sexual practices and prevention methods. Furthermore, in schools, topics on sexuality should be added to the curriculum to provide guidance, encourage female empowerment, and help reduce the group's exposure to sexually transmitted infections.

## References

1. Lorenc A, Nicholls J, Kesten JM, Macgregor L, Speare N, Harryman L, et al. Human immunodeficiency virus preexposure prophylaxis knowledge, attitudes and perceptions of sexual health risk in an age of sexually transmitted infection antimicrobial resistance. *Sex Transm Dis*. 2021 Sept;48(9):685-92. doi: 10.1097/OLQ.0000000000001384.
2. Zhang J, Ma B, Han X, Ding S, Li Y. Global, regional, and national burdens of HIV and other sexually transmitted infections in adolescents and young adults aged 10–24 years from 1990 to 2019: a trend analysis based on the Global Burden of Disease Study 2019. *Lancet Child Adolesc Health*. 2022 Nov;6(11):763-76. doi: 10.1016/S2352-4642(22)00219-X.
3. BRASIL. Lei nº 12.852, de 5 de agosto de 2013. Institui o Estatuto da Juventude e dispõe sobre os direitos dos jovens, os princípios e diretrizes das políticas públicas de juventude e o Sistema Nacional de Juventude – SINAJUVE [Internet]. Brasília (DF): Presidência da República, 2013. Disponível em: [https://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2013/lei/l12852.htm](https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2013/lei/l12852.htm). Acesso em: 03 set. 2025.
4. World Health Organization (WHO). Youth and health risks [Internet]. Geneva: WHO; 2011 [cited 2025 Sept 03]. Available from: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA64/A64\\_25-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA64/A64_25-en.pdf).
5. Oliveira CSR, Spindola T, Fonte VRF, Daher DV, Martins ERC, Melo LD. Saúde sexual de jovens universitários: práticas de cuidado entre mulheres e homens. *Rev Contexto Saúde*. 2024;24(48):e13868. doi: 10.21527/2176-7114.2024.48.13868.
6. World Health Organization (WHO). Global progress report on HIV, viral hepatitis and sexually transmitted infections [Internet]. Geneva: WHO; 2021 [cited 2025 Jul 10]. Available from: <https://iris.who.int/handle/10665/341412>.
7. Ministério da Saúde (BR). Boletim Epidemiológico – HIV e Aids 2024 [Internet]. Brasília (DF): Ministério da Saúde; 2024 [acesso em 10 jul. 2025]. Disponível em: [https://www.gov.br/aids/pt-br/central-de-conteudo/boletins-epidemiologicos/2024/boletim\\_hiv\\_aids\\_2024e.pdf/view](https://www.gov.br/aids/pt-br/central-de-conteudo/boletins-epidemiologicos/2024/boletim_hiv_aids_2024e.pdf/view)
8. Ministério da Saúde (BR). Protocolo clínico e diretrizes terapêuticas para atenção integral às pessoas com infecções sexualmente transmissíveis (IST) [Internet]. Brasília (DF): Ministério da Saúde; 2022 [acesso em 2025 jul 10]. Disponível em: <https://www.gov.br/aids/pt-br/central-de-conteudo/pcdts/2022/ist>.
9. Castro ATV, Magalhães IEN, Madeira JDS, Carvalho JGS, Assis NRG, Ribeiro SC, et al. O papel da atenção primária à saúde no controle de infecções sexualmente transmissíveis em adolescentes. *Rev Eletrônica Acervo Saúde*. 2020;12(12):e4908. doi: 10.25248/reas.e4908.2020
10. Moscovici S. Representações sociais: investigações em psicologia social. 11ª ed. Petrópolis; Vozes; 2015.

11. Jodelet D. Ciências sociais e representações: estudo dos fenômenos representativos e processos sociais, do local ao global. *Soc Estado*. 2018;33(2):423-42. doi: 10.1590/s0102-699220183302007.
12. Vinuto J. A amostragem em bola de neve na pesquisa qualitativa: um debate em aberto. *Temat* [Internet]. 2014 dez 30 [acesso em 2025 jul 10];22(44):203-20. Disponível em: <https://econtents.bc.unicamp.br/inpec/index.php/tematicas/article/view/10977>.
13. Bardin L. *Análise de conteúdo*. São Paulo: Edições 70; 2018.
14. Moscovici S. *Representações sociais: investigações em psicologia social*. 3ª ed. Petrópolis: Vozes; 2003.
15. Dorji T, Wangmo K, Tshering D, Tashi U, Wangdi K. Knowledge and attitude on sexually transmitted infections and contraceptive use among university students in Bhutan. *PLoS One*. 2022;17(8):e0272507. doi: 10.1371/journal.pone.0272507.
16. Zizza A, Guido M, Recchia V, Grima P, Banchelli F, Tinelli A. Knowledge, information needs and risk perception about HIV and sexually transmitted diseases after an education intervention on Italian high school and university students. *Int J Environ Res Public Health*. 2021;18(4):2069. doi: 10.3390/ijerph18042069.
17. Nwankwo PO, Sekoni OO, Omokhodion FO. Sexual practices and willingness to use female condoms among female undergraduate students of the University of Port Harcourt, Rivers State, Nigeria. *Afr J Med Med Sci* [Internet]. 2018 [cited 2020 Dec 10];47(4):365-72. Available from: <https://ojshostng.com/index.php/ajmms/article/download/450/211/826>.
18. Melo LD, Sodr  CP, Spindola T, Martins ERC, Andr  NLNO, Motta CVV. A preven o das infec es sexualmente transmiss veis entre jovens e a import ncia da educa o em sa de. *Enferm Glob*. 2022;21(65):74-115. doi: 10.6018/eglobal.481541.
19. McMann N, Trout KE. Assessing the knowledge, attitudes, and practices regarding sexually transmitted infections among college students in a rural Midwest setting. *J Community Health*. 2021;46(1):117-26. doi: 10.1007/s10900-020-00855-3.
20. Abric JC. A abordagem estrutural das represent es sociais. In: Moreira ASP, Oliveira DC, organizadores. *Estudos interdisciplinares de representa o social*. Goi nia: AB; 2003. p. 27-38.
21. Machado YY, Oliveira DC, Marques SC, Hip lito RL, Gomes AMT, Costa TL, et al. Qualidade de vida e suas representa es para pessoas vivendo com HIV: consensos e dissensos. *Contrib Ci nc Soc*. 2024;17(7):e8587. doi:10.55905/revconv.17n.7-307.
22. Silva VR, Lima LF. Papilomav rus humano (HPV) e o c ncer cervical: o entendimento de universit rias da unidade descentralizada de Campos Sales – CE. *Rev Biol*. 2020 out 29;20(1):4-9. doi: 10.11606/issn.1984-5154.v20p4-9.
23. Scull TM, Keefe EM, Kafka JM, Malik CV, Kupersmidt JB. The understudied half of undergraduates: risky sexual behaviors among community college students. *J Am Coll Health*. 2020;68(3):302-12. doi: 10.1080/07448481.2018.1549554.
24. Peixoto HA, Spindola T, Melo LD, Fonte VRF, Barros LMC, Arreguy-Sena C. Jovens universit rios e a vulnerabilidade masculina  s infec es sexualmente transmiss veis. *Enferm Foco*. 2024;15:e202432. doi: 10.21675/2357-707X.2024.v15.e202432.
25. Andrade DLP, Amaral EG, Oliveira SX, Silva CE, Chagas DB, Moura-Ferreira MC, et al. Empoderamento feminino e preven o do HIV/AIDS: promo o da autodefesa e a sa de. *Cad Pedagog*. 2024 jun 12;21(6):e4868. doi: 10.54033/cadpedv21n6-095

26. Wolter RMCP, Sá CP. As relações entre representações e práticas: o caminho esquecido. Rev Int Cienc Soc Hum [Internet]. 2013 [acesso em 2025 jul 10];23(1-2):87-105. Disponível em: <https://www.redalyc.org/pdf/654/65452530004.pdf>.

27. Pinho CM, Lima MCL, Fonsêca BRL, Silva JFAS, Silva MAS, Andrade MS. Representações sociais de enfermeiros acerca do processo de descentralização do atendimento ao HIV: abordagem estrutural. Rev Enferm UERJ. 2023;31(1):e68880. doi: 10.12957/reuerj.2023.68880.

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