

# Prevention of sexually transmitted infections in gay men: social representations study

A prevenção das infecções de transmissão sexual por homens gays: estudo de representações sociais Prevención de infecciones de transmisión sexual en hombres homosexuales: estudio de representaciones sociales

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#### **ABSTRACT**

**Objective:** to analyze social representations about prevention practices for sexually transmitted infections among young gay men. **Method:** a qualitative study grounded on the Theory of Social Representations and with a procedural approach was conducted with 27 young homosexual men in the city of Rio de Janeiro. The participants were subjected to semi-structured interviews from October to December 2023. Lexical analysis was used with the aid of the *IRaMuTeQ* software. All ethical aspects were respected. **Results:** the analysis showed that men recognize Sexually Transmitted Infections as a problem for their sexual health. They stated seeking information about these infections and undergoing regular care and examinations. Preventive practices are modulated according to sex partners. **Final considerations:** gay men's social representations about infections and forms of transmission are anchored in biomedical knowledge; however, their preventive practices are shaped by cultural, psychosocial, affective and attitudinal dimensions. **Descriptors:** Sexual and Gender Minorities; Sexually Transmitted Diseases; Social Representation.

#### **RESUMO**

**Objetivo:** analisar as representações sociais sobre as práticas de prevenção de infecções sexualmente transmissíveis por homens jovens gays. **Método:** estudo qualitativo, com suporte da Teoria das Representações Sociais e abordagem processual, realizado com 27 homens jovens homossexuais no município do Rio de Janeiro, que responderam a uma entrevista semiestruturada, no período de outubro a dezembro 2023. Empregou-se a análise tipo lexical com auxílio do software Iramuteq. Todos os aspectos éticos foram respeitados. **Resultados:** a análise evidenciou que os homens reconhecem as infecções sexualmente transmissíveis como um problema para a saúde sexual. Afirmaram que buscam informações sobre essas infecções, realizam atendimentos e exames de modo regular. As práticas preventivas são moduladas em função da parceria sexual. **Considerações finais:** as representações sociais dos homens gays sobre as infecções e os modos de transmissão estão ancoradas no conhecimento biomédico, entretanto suas práticas preventivas são moldadas pelas dimensões culturais, psicossociais, afetivas e atitudinais. **Descritores:** Homens que fazem Sexo com Homens; Infecções Sexualmente Transmissíveis; Representação Social.

#### RESUMEN

**Objetivo:** analizar las representaciones sociales sobre las prácticas de prevención de infecciones de transmisión sexual entre hombres jóvenes homosexuales. **Método:** estudio cualitativo, sustentado en la Teoría de las Representaciones Sociales y enfoque procedimental, realizado con 27 jóvenes homosexuales de la ciudad de Rio de Janeiro, que respondieron a una entrevista semiestructurada, de octubre a diciembre de 2023. Se utilizó el análisis lexicográfico con el soporte del software *IRaMuTeQ*. Se respetaron todos los aspectos éticos. **Resultados:** el análisis mostró que los hombres reconocen las infecciones de transmisión sexual como un problema para la salud sexual. Indicaron que buscan información sobre estas infecciones, acuden a atención sanitaria y realizan exámenes periódicos. Las prácticas preventivas se regulan en función de la pareja sexual. **Consideraciones finales:** las representaciones sociales de los hombres homosexuales sobre las infecciones y los modos de transmisión se basan en el conocimiento biomédico; sin embargo, sus prácticas preventivas están moldeadas por dimensiones culturales, psicosociales, afectivas y actitudinales.

**Descriptores:** Minorías Sexuales y de Género; Enfermedades de Transmisión Sexual; Representación Social.

## INTRODUCTION

Sexually Transmitted Infections (STIs) are a problem still prevalent among young people due to sexual behaviors and lifestyle habits. These infections are among the most common causes of disease in the world and considered a public health problem due to the difficulty adhering to existing preventive measures, disseminating knowledge about their biological and social repercussions and timely diagnosing/treating them to avoid complications<sup>1-3</sup>.

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According to the epidemiological bulletin, the number of acquired syphilis cases recorded in the Notifiable Diseases Information System (*Sistema de Informação de Agravos de Notificação*, SINAN) from 2012 to June 2023 totals 1,340,090. Most of these notifications are concentrated in males (61.3%). There is a growing trend in the acquired syphilis detection rates in all age groups, with 41.6% and 39.2% mean annual increases among individuals aged from 13 to 19 years old and from 20 to 29 years old, respectively<sup>4</sup>.

According to the Brazilian Ministry of Health, the STI incidence rates among young people are high. In addition to syphilis, there are data on the Human Immunodeficiency Virus (HIV) and on the Acquired Immunodeficiency Syndrome (AIDS), which recorded 24.1 new cases among men for every 100,000 inhabitants in 2021. A total of 345,069 (70.5%) cases were reported in men and 144,364 (29.5%) in women. The gender ratio has changed over time: in 2007, it was 14 men for every ten women and, as of 2020, it doubled to 28 men for every ten women<sup>5</sup>.

In terms of young men, the prevalence of STIs is a reality with significant growth. The HIV/AIDS epidemiological bulletin indicates that there has been an increase among men. In the period from 2007 to June 2023 and among individuals aged 13 or over, the main exposure category among males was Men who have Sex with Men (MSM) (52.6%). Worldwide, one out of 20 adolescents contracts some type of Sexually Transmitted Infection each year, reinforcing the high contamination rate in this group<sup>2,3</sup>.

Among the behaviors that render young people more vulnerable to these problems, it is known that, in general, men are more likely to dispense with condoms due to lack of access to the resource, as they are unable to convince their sex partners of the need to use them because they do not know how to handle them correctly or for considering that using condoms reduces pleasure, among other aspects. In the presence of an STI, the HIV transmission risk is from three to five times higher<sup>3</sup>. The Sexually Transmitted Infections that most affect young men are Chlamydia, Gonorrhea, Syphilis, Genital Herpes, HIV and Human Papillomavirus (HPV). Exposure to these infections becomes increasingly common due to the not using condoms<sup>2,3,6</sup>.

STIs carry a stigma with them that is still shrouded in prejudice. Many people are afraid to reveal that they are sick and adopt behaviors that make them vulnerable. As a result of these attitudes, a barrier is created to health care promotion and to providing treatments available in health networks. Assistance in health services is only directed at treating worsening of the disease, as users do not frequently seek out health promotion actions<sup>1</sup>.

It is known that, like other social groups, gay men are exposed to Sexually Transmitted Infections due to their vulnerable sexual behaviors. In this context, it is relevant to highlight the importance of sex education, access to health resources and continued condom use during sexual intercourse to protect against infections that can affect quality of life<sup>2,7</sup>.

Young adult men are significantly vulnerable to STIs/HIV. This group is comprised by people with different sexual orientations and gender identities, such as heterosexuals and the LGBTQIA+ population. A study indicates that MSM showed higher percentages of cases detected in the age groups of 13-19 years old (from 70.7% to 73.0%), 20-29 years old (from 66.7% to 70.0%) and 30-39 years old (from 47.4% to 51.4%)<sup>5</sup>.

Considering that sexual practices and STI prevention are anchored in subjective aspects, to understand this process it is necessary to approach the Theory of Social Representations (TSR), which signals the existence of a relationship between human psychology and social/cultural issues and beliefs that perpetuate a person's individuality<sup>8</sup>.

Based on these considerations, the study objective was defined as STI prevention among young homosexual men. Given the above, it is believed that this research is relevant and contributes to health professionals, including Nursing ones, in the care to be provided to this population segment, considering that it discusses sexual practices and STI prevention among young homosexual men based on this group's social representations regarding these practices. In addition, by presenting these young people's singularities, it can also favor professionals to perceive young homosexuals in an individualized way and be able to offer educational practices to mitigate the occurrence of STIs.

The study aimed at analyzing social representations about prevention practices for Sexually Transmitted Infections among young homosexual men.

## **THEORETICAL FRAMEWORK**

Social representations are a set of concepts and explanations that can be understood as common sense theories through which social realities are interpreted and constructed. It is necessary to understand the relationship between each person and how the representation of that object is built, according to its anchoring, objectification and immersion





in a given process. The theory proposes explaining everyday issues that Psychology and Sociology models were not able to account for until then. The objective is to understand people's representations about a given object in their collective<sup>8</sup>.

The theory seeks to highlight the relationships between the individual/subject and an object, understanding that there is a social construction based on beliefs, religions, habits and ideals, among others. These sets of concepts, statements and explanations, which are Social Representations (SRs), are considered as common sense "theories", collective sciences through which social realities are interpreted and even constructed<sup>9</sup>.

The complementary procedural approach developed by Denise Jodelet understands SRs as the study of the processes and products through which subjects and groups construct and signify the world, integrating the social and cultural dimensions with history, more intimately addressing the close relationship between subject and object, representations conveyed in everyday life, through the individuals' and groups' discourse, behaviors and social practices, documents and discourse fixation records<sup>0</sup>.

#### **M**ETHOD

This is a descriptive and qualitative research based on the TRS and using a procedural approach <sup>10</sup>, integrated into the project entitled "Practices for preventing Sexually Transmitted Infections in the sexual diversity context", conducted with 27 homosexual men aged 18-29 years old and sexually active, who reported having had sexual relations in the last 12 months.

The participants were recruited using the snowball sampling technique, which is non-probability sampling that uses reference chains and is recommended for researching groups that are difficult to access or study<sup>11</sup>. The seed individual was a young friend of an MSc student, who recommended the other participants, and so on. The interview script was previously tested with four young individuals, and the necessary adjustments were made to the instrument. This material was not incorporated into the sample set of the interviews.

The data were collected in the city of Rio de Janeiro, in public spaces where a reserved area was sought, ensuring the participants' privacy and confidentiality of the information. Two instruments were used: a questionnaire for social characterization and sexual practices and STI prevention; and a semi-structured interview. The information was collected at two moments. At the first one, the young people answered the questionnaire for the group's sociodemographic characterization variables such as age, skin color, schooling, housing arrangement, consumption of alcoholic beverages, emotional bonds and variables related to STI knowledge and prevention practices. At the second moment, the semi-structured interviews took place, scheduled in advance and which could be in person or through the *Google Meet* platform depending on each participant's availability. This stage was in charge of a nurse and MSc student involved with this topic in her dissertation, ensuring the participants' privacy, with the sole presence of the interviewer and the interviewee. It is noteworthy that the researcher was a research group member and duly trained to record qualitative interviews.

Considering the difficult access to the study population and the high number of young people who refused to take part in the interviews (some accepted but did not show up on the scheduled day and did not answer the contact attempts), it was decided to end this stage with 27 participants, considering that the statements were repeated and did not add new information to the study. It is worth noting that seven men refused to participate during the interview process, which required searching for new deponents.

The interviews lasted a mean of 30-50 minutes, were recorded in an electronic device with prior authorization from the participants and later transcribed to process and analyze the findings. No interview was repeated. They were organized into thematic blocks, addressing the following aspects: love relationships; sexual practices; knowledge about STIs; forms of transmission and preventive practices. Aspects referring to the representational dimensions and to information flow in the constitution of the representations were incorporated into the development of the themes.

After the interviews were conducted, they were reproduced and transcribed in full, and a *corpus* was subsequently created in which the interviewer's questions and interventions were removed. At the beginning of each interview, a command line was inserted containing the interviewee's number, age and whether or not they were in a love relationship. A text *corpus* is the grouping of the interviewees' answers, that is, the *verbatim* statements from each interview gathered in a single text file, separated by the command line.

The data were handled in *IRaMuTeQ*, which processed the lexicographic analysis, which indicates and reformats text units so they can be identified in terms of quantity and then reformatted these same units. The software also performs multivariate analysis, a Descending Hierarchical Classification (DHC) method used in this study where Text





Segments (TS) are classified according to their terms and the set is divided into classes based on frequency of the reduced forms. From this process, a dendrogram was generated showing the relationships between the classes <sup>12</sup>.

This research used the TRS procedural approach; however, as the group under study was difficult to access, it was not possible to reach the recommended number for conducting studies using this theoretical support: 30. It is worth noting that saturation of the findings was noticed in the 24<sup>th</sup> interview, when the data began to repeat; however, it was possible to conduct three more interviews to confirm such saturation.

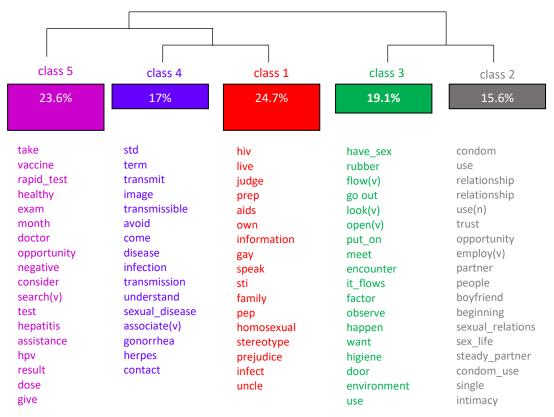
The study followed all ethical procedures and was approved by a Research Ethics Committee; in addition, all those who agreed to participate in the research signed an informed consent form.

#### **RESULTS AND DISCUSSION**

The men participating in this study were mostly characterized as follows: 18 (66%) were between 26 and 29 years old; 15 (55%) stated being black-/brown-skinned; 18 (66%) had Complete Higher Education; 17 (63%) reported not having a partner; 10 (37%) lived with their parents and 20 (74%) reported having a paid job.

Regarding sexual practices, 22 (81%) reported having had sexual relations with more than one partner in the same period; 18 (66%) reported having a steady partner in the last 12 months and, of these, 4 (22%) used condoms inconsistently or sporadically. As for casual partners, 19 (70%) reported this practice; of these, 11 (58%) reported always using condoms in these relationships and 16 (60%) stated that they "sometimes" used alcohol and/or drugs before sexual intercourse. Considering the participants' characteristics, it can be seen that these men share social and behavioral elements that place them in the same belonging group, which can influence their social representations about Sexually Transmitted Infections and prevention practices.

The results corresponding to the analysis of the interviews are presented in the Descending Hierarchical Classification (DHC) dendrogram, generated from the lexical analysis of the discursive content. The content consisted of 1,323 Text Segments (TS), of which 1,167 were classified for analysis; in other words, there was 88.30% leverage of the original *corpus* and, therefore, good use of the material. The *verbatim* content was organized into five classes, based on successive binary divisions of the *corpus*, as shown in Figure 1.



**Figure 1:** Dendrogram with the distribution of classes provided by the *IRaMuTeQ* software related to sexual behaviors, knowledge and STI prevention among homosexual men. Rio de Janeiro, RJ, Brazil, 2023.





A description of the afore mentioned classes will be presented below, according to their respective contents.

## Class 5 - STI prevention strategies and seeking health care

This class contains 275 TS and corresponds to 23.6% of all classes. It is the second largest class, showing that the topic is relevant to young people. The words present in this class denote the prevention and self-care strategies adopted by the group and reflect the gay men's view regarding their protection in relation to STIs.

Some words associated with that class were take, vaccine, rapid test, healthy, exam, month, doctor, negative, seek and test. This class encompasses the attitudinal dimension and reflects the STI prevention practices, the search for care and health information. Some participants mentioned the search for health care in their reports:

- (...) I've already taken tests to detect HIV, syphilis, hepatitis and rapid tests. (124, 29 years old, Casual relationship, x2 599.46)
- (...) when I notice any change, I immediately go to the health center. According to the WHO, no one is healthy. I've taken all the vaccines, I just haven't taken the HPV one because I think I took it when I was a child, maybe. (18, 28 years old, Steady relationship, x2 421.40)
- (...) I try to get tested every six months, the rapid test at the health center. I only get rapid tests. I consider myself healthy because I started paying more attention since last year, both to my body and to my diet. (I13, 26 years old, Casual relationship, x2 441.53)
- (...) I usually seek health care every six months, usually to take the syphilis tests. Because, if I take a rapid test, it'll always be positive, I need to do the lab tests anyway. (I19, 25 years old, Casual relationship, x2 324.10)

When asked how they seek information regarding their health, 107 and 120 stated the following:

- (...) I look for information on social media, any social media like Instagram, Facebook and even Google, which is the most comprehensive. I search more on Instagram and even on TV (107, 25 years old, Fictional relationship, x2 222.35)
- (...) any change I have, I always go to the doctor, I seek information from the health professional. (I20, 29 years old, Steady relationship, x2 311.46)

#### Class 4 - Knowledge about STIs, forms of transmission and associated images

Class 4 is comprised by 199 TS and corresponds to 17% of all classes. The words in this class translate young people's knowledge, associated with knowledge construction in relation to STIs, the infections' form of transmission and the associated images. Some words associated with this class were STD, term, transmit, image, transmissible, avoid, come, disease, infection and transmission.

When reflecting on the meaning of STIs and associated images, the participants stated the following issues:

I think everyone shares a bit of fear, everyone is afraid of having something. When I hear the term STD, I don't know if an image comes to mind that represents the disease, but the image of the male condom as a prevention means comes to my mind. (I17, 26 years old, Steady relationship, x2 435.79)

- (...) when I hear the term STD, I think of secretion, itching, discomfort, odor. That's what comes to my mind. (I12, 28 years old, Casual relationship, x2 510.69)
- (...) I understand sexually transmitted diseases as viruses, fungi and bacteria that are transmitted through unprotected sex, oral sex, vaginal sex, anal sex or saliva. (IO1, 26 years old, Casual relationship, x2 427.36)

The image that comes to my mind when I hear about STI transmission is not using condoms. I've had experiences related to STI exposure through penetration without a condom, but this is something that happens more sporadically. (104, 29 years old, Casual relationship, x2 503.65)

According to the population under study, HIV is the infection most easily remembered by the group, although there are several types of STIs.

I understand STD as an infection that affects a person's health and is transmitted through sexual intercourse without a rubber. An example of a sexually transmitted disease that comes to my mind is HIV, but I know there are others. (102, 25 years old, Steady relationship, x2 482.18).

- (...) the sexually transmitted disease that comes to my mind is HIV. (IO2, 25 years old, Steady relationship, x2 585.11)
- (...) I think I associate it a lot with HIV, you don't run away from it much. (I14, 28 years old, Casual relationship, x2 349.79)





#### Class 1 - Feeling of judgment and prejudice associated with sexual orientation and STIs

Class 1 consists of 288 ST and corresponds to 24.7% of all classes; it represents the largest class derived from the analysis, which denotes the relevance of this content for the group. The words in this class imply relationships, feelings of judgment, prejudice, stereotypes and experiences in relation to STIs. Some words present in this class were HIV, live, judge, PrEP, AIDS, own, information, gay, speak and STI. The young people's reports make this connotation explicit:

You're looked down upon, or they say: "But because you're a homosexual, this was bound to happen at some point. You don't take care of yourself." So, I think they [people] judge a lot. (...) unfortunately, today they still link homosexuality to HIV and this is also true within the tribe itself. (I11, 29 years old, Casual relationship, x2 167.74)

(...) a friend saying, "I heard that this person has HIV, but he's really handsome. Be careful, friend!" And then I thought: "Wow! Just because I'm gay, you might as well get it too." (I14, 28 years old, Casual relationship, x2 145.09)

It's worrying, even if you're sure that you can have a normal life, it's not completely normal [person living with HIV]. Because that fear affects your psychology, considering the social environment I live in. (I18, 29 years old, Casual relationship, x2 162.76)

We carry this stereotype about AIDS a lot. I'm 29 years old, I obviously didn't live through that AIDS epidemic moment. (I10, 29 years old, Casual relationship, x 2 134.60)

A report showed that there is still prejudice when it comes to sex between men:

Here in Rio, I didn't feel so rejected in these issues of treatment and care, which happens in the basic health units. If it were in my state, because I'm from Mato Grosso, it would be different. (I19, 25 years old, Casual relationship, x2 143.91)

## Class 3 - Lifestyle habits and vulnerabilities to exposure to STIs

Class 3 is made up of 223 ST and corresponds to 19.1% of all classes. The words in this class translate young gay men's behaviors regarding their sexual experiences, their lifestyle habits and their vulnerabilities to STIs. Some words associated with this class were have sex, rubber, flow(v), go out, look(v), put on, meet, encounter, observed and happen).

The statements of the young people researched reveal the lifestyle habits of this social group at this life stage:

- (...) I've already had situations where I met people to have sex. (I10, 29 years old, Casual relationship, x2 209.72)
- (...) it was quite without thinking at the time, I got there, at the time, I didn't have a rubber and it happened, but then I was very worried because I barely knew the person. (I13, 26 years old, Casual relationship, x2 196.32)
- (...) there's also Tinder (Tinder web) which I've also used, I've gone out a lot through the Tinder app. But the thing is that when I meet gay people, we already have sex usually on the first date. (I14, 28 years old, Casual relationship, x2 155.06)
- (...) I always carry a rubber with me. If I meet someone and neither of us has one, I don't think I'd do it, I wouldn't have sex. (I13, 26 years old, Casual relationship, x2 196.55)

## Class 2 - Sexual behaviors, sex partners and condom use

This class contains 182 TS and corresponds to 15.6% of all classes. The words present in this class were condom, to use, relationship, relation, use (n), trust, opportunity, employ, partner and people. It presents young gay men's sexual behaviors with regard to love relationships, sex partners and condom use.

Some excerpts from the participants' reports demonstrate this thought:

My sexual behavior, when it's not a serious relationship, I've always used a condom during penetration. I always forget to use it during oral sex. Nowadays, I don't always use it, it depends on the routine (I18, 29 years old, Steady relationship, x2 701.20).

I can't have sex after drinking. I only use condoms when I'm organized. I'm single right now. I had a relationship that lasted 3 months. We used condoms at the beginning but not in the middle, and I started using them again at the end [of the relationship]. (I19, 25 years old, Casual relationship, x2 667.26).

We used condoms at the beginning of this relationship, but then we stopped using them. In fact, before that, we did the test and saw that it was possible to do without condoms. Then we started doing it without them for the rest of our relationship. (104, 29 years old, Casual relationship, x2 621.14).





Furthermore, the type of partner also influences adherence (or not) to condom use, with little (or no) use of this resource being common in steady and long-term relationships.

It's happened before and I didn't use a condom. We were dating, a nice, closed relationship. In fact, that's what made me stop because we'd known each other for a while and then we decided to move on to this point [stop using condoms]. (109, 29 years old, Casual relationship, x<sup>2</sup> 597.13).

(...) in casual relationships, I use condoms every time. I've failed to use condoms in the past, and that's why I needed to use PEP since then. (I12, 25 years old, Casual relationship,  $x^2$  882.51)

A summary of the results that address the representations of STI prevention practices will be presented below, as perceived by the group of young homosexual men. The group of men under study reported seeking out health units for routine exams and immunization; however, most of them tend to do so only for rapid tests. In this context, it is necessary to make people aware that routine exams are not limited to testing for STIs, with the aim of changing the perception that STIs only affect this population. It is worth highlighting the importance of undergoing periodic exams on a routine basis as a practice for preventing health problems.

It is known that health services currently offer free and open access to care, STI tests and resolution of these health problems; however, there is no preparedness for the comprehensive resolution of demands regarding the population gender and sexual orientation, due to inadequate training of professionals to serve the different groups <sup>13,14</sup>.

A research study conducted in the Brazilian South region shows that there is an outpatient clinic specialized in the LGBTQIA+ population, which eases access for these users to maintain health care beyond STIs. An identity of belonging and inclusion is strengthened in this space<sup>15</sup>.

When it comes to seeking health information, the media currently plays an important role in disseminating content, especially on health care. Many individuals oftentimes use these media to access information and clarify doubts about health care and diseases, due to ease of access and to the fact that it can be done from anywhere. Before these resources were available, it was only possible to access this information if the users attended a basic unit<sup>16</sup>. STIs are still rarely discussed in schools and other social spaces frequented by young people. Although the group lives in a setting marked by intense information sharing, with wide access to Internet and social media, there is a significant gap in knowledge about HIV, the risks associated with different sexual practices and the new prevention technologies available<sup>17</sup>.

Some participants mentioned that they sought health professionals to clarify doubts and questions related to health, using them as a reference. This finding reinforces the purpose established by the Unified Health System (*Sistema Único de Saúde*, SUS), regarding health teams' role, which is to provide guidance and be the gateway for these users to enter the health system. Although the participants reported seeking rapid tests and health care, a study<sup>18</sup> showed that, when compared to heterosexual men, Men who have Sex with Men (MSM) seek HIV tests and health care after indulging in unprotected sex or when they fail to use condoms. A research study <sup>19</sup> that evaluated HIV testing found that 62.5% of the general population aged between 15 and 59 years old had already undergone an HIV test at some point in their lives, while this proportion is 81.9% among MSM.

This analysis shows that there is a flow of diverse information and knowledge about STIs and prevention practices and that participants are seeking this information, both in person through health services, health professionals and social groups, and virtually, via Internet. This context is extremely relevant for building group representations. It is important to highlight that, within the TRS scope, language, communication and social interactions are valued for the construction and maintenance of social representations<sup>20</sup>.

Class 4 covers the representational content about the group of men's knowledge regarding STIs, modes of exposure and predisposing factors that can be evidenced in the participants' testimonies. It also addresses the imagery universe of an SR, contemplated in objectification and in the words expressed: understand, associate and image. In addition, it includes the affective-attitudinal dimension, as feelings such as sadness, fear and shame are mentioned.

It is known that a Social Representation (SR) is always a representation of something (object) and of someone (subject). An SR is in a relationship of "symbolization" with its object, taking its place, and of "interpretation", conferring it meanings. These meanings result from an activity that makes a representation a "construction" and an "expression" of the subject<sup>10</sup>.





The group of participants in this research has some knowledge about STI transmission and understands that condoms are the main resource to avoid exposure to infections. The terms infection/disease are still synonymous with discrimination, isolation, segregation and shame and, consequently, they generate fear: fear of becoming infected and getting sick; however, this feeling is not sufficient to modify sexual practices.

A study that evaluated how a mobile app is used to enhance university students' knowledge about HIV found that, although they had more access to information about preventing the virus, the group presented inadequate knowledge and behaviors<sup>21</sup>. Lack of information about STIs, forms of transmission and prevention has been highlighted in other studies and favors young people's vulnerability<sup>22,23</sup>.

It is known that there are currently more than 30 different types of viruses, bacteria or parasites that can be transmitted mainly through sexual contact. Other forms of transmission are through blood or mucous membranes and some of them can also take place vertically (from mother to child during pregnancy, childbirth or breastfeeding). The World Health Organization estimates that almost 1 million people are infected every day with any of the four curable STIs: chlamydia, gonorrhea, syphilis and trichomoniasis, understanding that there are still underreported cases<sup>2,3</sup>.

The Human Immunodeficiency Virus infection is a recurrent STI. In 2021 alone, approximately 1.5 million new HIV infections and 650,000 deaths attributed to AIDS-related causes were recorded. Young adults have seen the highest increase in diagnosis rates, probably related to frequent changes in partners at this life stage, lifestyle and sexual discoveries<sup>5,22,24,25</sup>. Among the existing STIs, HIV is probably present in these individuals' everyday life as a result of a series of historical events. For a long time, this infection was known as the "gay plague", being the disease of a specific population group. The first cases of the pathology were identified in 1983, when it was associated with some more vulnerable groups, such as homosexuals<sup>5,26</sup>.

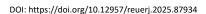
Regarding the knowledge of the group participating in this study about STIs, it is noted that 66% had Complete Higher Education. Individuals with Higher Education levels tend to have more access to information sources, awareness campaigns and medical consultations, which may result in better knowledge about STIs and their prevention methods. A study<sup>27</sup> conducted with 194 people diagnosed with STIs observed that awareness about infections was directly related to schooling level. Higher schooling levels were associated with more knowledge and treatment-seeking behaviors. However, having a higher schooling level does not necessarily imply having adequate knowledge about STIs. Thus, although on average better educated individuals have greater knowledge than those with lower schooling levels, this knowledge is still far from ideal.

It is known that, with the advancement of science and the implementation of public policies, health treatments are aimed at the entire population. In this context, HIV is understood as an infection that can affect any individual who does not adopt safer sexual practices (such as young people, women, homeless people and individuals deprived of freedom), and is not exclusively associated with a specific social group <sup>14,26</sup>. Thus, for young men to adhere to practices to prevent Sexually Transmitted Infections, it is essential that sexuality be understood as a fundamental human right, that the services caring for this population offer active listening, an environment that is conducive to talking about sexual practices, free from prejudice and impositions, and that favors clarification of doubts.

One of the TSR assumptions is that the structure of a social representation is configured in three dimensions: Information, Representation field and Attitude. Information concerns the organization that the group has regarding the represented social object. The Representation field provides an idea of image, a social model, with concrete content, expressing a specific aspect of the represented object. In turn, Attitude implies focusing on the global orientation in relation to the object, that is, it is how each person positions himself/herself in relation to the object, which may imply a judgment<sup>20</sup>. It is possible to perceive the presence of these three dimensions in this class, given that the young men showed some understanding, albeit limited, about STIs and the forms of transmission, made associations with images and considered that these infections are stigmatizing and generate prejudice.

Even today, young homosexual men face difficulties expressing their sexual orientation in society and in their family nucleus due to taboos and social stigma. This scenario is the result of a cultural view permeated by prejudice and discrimination, and directs the group towards practicing a clandestine and unsafe sexuality <sup>7,26</sup>. This situation oftentimes encourages these individuals to place themselves in vulnerable situations when it comes to establishing emotional relationships with other people, especially in the case of young subjects who are going through a discovery phase <sup>19,28,29</sup>.







Prejudice associated with HIV and AIDS was a recurrent theme in the interviewees' statements, perpetuated by stigma, discrimination, feelings of fear and guilt. It is known that stigma, discrimination and prejudice are intertwined in the history of HIV and other STIs and continue to be present today. These factors affect prevention actions, access to diagnosis and health services, adherence to treatments, social relationships and the physical and mental health of individuals<sup>30</sup>. Stigma and discrimination are a barrier to access to HIV testing and treatment. They can manifest themselves in different ways, such as fear of being discriminated against or judged based on sexual orientation and gender identity, fear of being disrespected or moralized by health professionals and concern about confidentiality breaches, among other factors<sup>31</sup>. Some authors<sup>32</sup> corroborate this view by describing that MSM have difficulty sharing their sexuality with health professionals and face stigmatizing and discriminatory attitudes in health services.

The constituent elements of Class 3 belong to the attitudinal and practical dimension of SRs. This dimension is linked to young gay men' feelings, pleasure and sexual behaviors. Just like other individuals, gay men are vulnerable to Sexually Transmitted Infections. In this context, sexual education actions, access to health resources and encouragement for condom use in insertive and oral sex practices are relevant. It is worth noting that information is currently available to everyone and that, as educators, health professionals can inform the population about safer sexual practices<sup>7,26,33,34</sup>.

In this sense, it is important to mention the relevance of health professionals' work in Primary Care (recognized as the population's gateway to health services) regarding consultations and support, which are a necessary tool in the fight against STIs. On the other hand, as some authors add, although many professionals have knowledge related to how to approach the LGBT population, it is necessary to develop care modalities that can in fact accommodate differences. As a specialized environment, the health field has the potential to aggregate new care modalities, include differences and transform society<sup>33</sup>.

Young people can be considered as a population group that requires greater attention and a special focus on the implementation of health strategies and public policies. During this period, values, attitudes, habits and behaviors are in the formation and maturation process and, as a result, can render this population segment more vulnerable. The theme of sexuality is a component that confers meaning to human existence and represents a vital function of individuals, as it involves biological, psychological, social and cultural factors<sup>35,36</sup>.

Some of these sexual practices are performed in a risky way during casual encounters due to the ease of dating apps, which changes today's sexual dynamics and consequently increases people's vulnerability. There are apps designed to arrange casual encounters that are only intended for casual sex, which can become a risk source for the unbridled spread of STIs<sup>37</sup>.

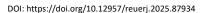
These dating and sex encounter apps are social networks that mediate the search for profiles/individuals with whom a given person has affinities, so that it is possible to establish an emotional or strictly sexual relationship. the first physical encounter sometimes takes place at the time of this encounter; therefore, it is common for people to be unaware of their sexual partners' self-care habits and sex history. Some participants reported that they do not engage in sexual activity in these casual encounters if there is no condom available.

It is understood that the participants' lifestyle habits are practices that place them in vulnerable situations, exposing them to unknown dangers. Young people are aware of the high risk that these practices can entail for their physical integrity, but they carry them out deliberately, oftentimes believing in their invulnerability<sup>28</sup>.

The adoption of risky sexual behaviors is noticeable in the group researched, with inconsistent condom use, in addition to the consumption of alcohol and/or drugs before sexual intercourse. STI prevention involves a set of factors that will contribute to preserving people's sexual health. Whether physical or psychological and associated with the Psychoactive Substance (PAS) use, the inherent characteristics of young people place them in risky situations and can encourage the adoption of Risky Sexual Behaviors (RSBs). In addition, consumption of these substances has increased significantly among the young population<sup>36</sup>.

The constituent elements of Class 2 belong to the affective and practical dimension of SR. This dimension is linked to feelings, pleasure, affective relationships and condom use by young gay men. The young men interviewed made it clear in their statements that condom use is aligned with the type of sex partners and that this resource is not usually employed in oral sex practices. A study conducted in China, which evaluated sexual behaviors among MSM, showed that the condom use percentage increased from 41.6% to 52.05% in 2017, revealing that the basic measures to raise awareness about the importance of prevention practices have been reaching this population segment<sup>38</sup>.







A study conducted at two Higher Education Institutions in Rio de Janeiro obtained results similar to those found in the current one, showing that university students used condoms during their first sexual intercourse, but that such use decreased as the relationships became more "stable". It was found that 52% of the group was exposed to vulnerable situations due to their risky sexual behaviors and that some participants had already been diagnosed with some STI<sup>24</sup>. A study developed in Brazil with college students associated dating app use with risky sexual behaviors and found that, although the participants had high schooling levels and occasional sexual partners, they did not use condoms consistently<sup>25</sup>.

A study that assessed condom use in love relationships among 728 young Portuguese men aged 18-29 years old found that there are condom use patterns according to the relationship type and its characteristics, mediated by commitment, intimacy and sexuality. This result corroborates the findings of this study. Condom use was more frequent in vaginal sex than in anal and oral practices, and less frequent in committed relationships<sup>39</sup>. A study conducted in Brazil found that the main factors associated with inconsistent male condom use among MSM were being a homosexual, having a steady partner, practicing oral/insertive anal sex and having an STI diagnosis. Having received advice from a friend about HIV testing and being a sex worker were protective factors for this practice<sup>7</sup>.

When assessing the prevalence of risky sexual behaviors and associated factors among university students in southern Brazil, some authors found that male students had RSBs in 10.8% of the cases. These RSBs were positively associated with male gender, psychoactive substance use before the last sexual intercourse and dating app use in the last three months<sup>25</sup>.

According to some authors<sup>40</sup>, consumption of alcohol and drugs (either before or during sexual intercourse) reduces the judgment ability and increases the likelihood of indulging in unprotected sexual intercourse, considering that use of these substances is oftentimes related to impulsive decisions and to difficulty negotiating condom use.

Condom use by MSM is observed in short-term casual relationships, with new partners, with reduced use in the case of regular partners or in casual relationships with known and more frequent partners. Casual sexual relationships are understood as multiple and complex, ranging from single encounters between strangers, one-night stands and sexual encounters between friends without the intention of becoming partners in a relationship, increasing the vulnerability of the MSM group<sup>22,41</sup>. Studies with MSM have found that condom use is high in sexual practices with strangers. However, there is a change in use of this method in regular relationships, falling into disuse<sup>7,20,39</sup>.

It is perceived that, although the SUS offers condoms and Pre-Exposure Prophylaxis (PrEP) (to prevent HIV/AIDS contamination, with medication intake before unprotected sexual intercourse), there is still co-responsibility of the partner when it comes to prevention. In longer-lasting love relationships, some men tend not to use condoms because they know their partner and trust them<sup>14,19,24,26,29,41</sup>. It is believed that the motivation for MSM not to use condoms during sexual intercourse may be associated with misinformation, pleasure and trust in the partner, while use of this resource is linked to health care<sup>38,41</sup>.

The more stable and long-lasting the relationship, the lower the condom use chances, and prevention trust is transferred to the partner. The idea of introducing this preventive method in a serious relationship can be synonymous with infidelity and not trusting the partner. Thus, use is maintained with casual partners<sup>7,39</sup>. The men under study understand the importance of using condoms in sexual relations and realize that this resource is the main prevention means against STIs, although they do not use them in all sex encounters. Even if individualized, the prevention practice is still linked to the partner and this method ceases to be used depending on the relationship type, as indicated in other studies<sup>7,39,41</sup>.

It is clear that there is no alignment between the group's social thinking regarding STIs and knowledge about protective measures against infections and preventive practices, especially regarding systematic condom use during sexual relations. However, it is considered that this type of situation is a result of the influence of the representation of other objects, such as condoms and emotional relationships. Regarding condoms, there is a current discourse that seeks to justify non-use of this resource because it is something that interferes between partners, in addition to causing discomfort. Regarding love relationships, duration of the relationships generates trust between the parties and, consequently, condom use is dismissed, as some participants mentioned in their testimonies.

# **Study limitations**

The study has the limitation of having been conducted in a single city from the state of Rio de Janeiro, in the Brazilian Southeast. It would be appropriate to develop studies in other regions with different sociocultural





characteristics in order to further discuss the topic. The results found are similar to those of other studies and highlight the reality of sexual minorities such as homosexuals, who suffer from stigma and discrimination.

#### **CONCLUSION**

The study showed that condom use and rapid testing are resources employed by young gay men to combat STIs and represent self-care for sexual health. The group's social representation about STI prevention is anchored in cognitive and practical dimensions; however, infection prevention practices are permeated by psychosocial and cultural aspects involving affective relationships. In the participants' understanding, the social representations about STI prevention refer to self-care, with self-protection actions symbolized by the terms "condom" and "PrEP", denoting concern with individual protection regarding Sexually Transmitted Infections.

The group expressed a feeling of judgment and prejudice from society regarding the sexual practices and behaviors of individuals in same-sex relationships. The gay men under study recognize the main STIs and the forms of exposure to infections and that this term still carries a lot of discrimination, taboo and prejudice with it. The TRS made it possible to get closer to the reality experienced by this group and their uncertainties and to understand the theme of this study.

It is relevant that health professionals implement preventive actions against STIs, with discussion groups about STIs and infection prevention, treatment and existing public policies, is relevant, as is the adoption of safer sexual practices, with condom use, testing and immunization.

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#### Author's contributions

Conceptualization, A.S.M. and T.S.; methodology, A.S.M. and T.S.; software, A.S.M., V.R.F.F. and H.A.P.; formal analysis, A.S.M., V.R.F.F. and H.A.P.; investigation, A.S.M. and T.S.; resources, T.S.; data curation, T.S., S.C.M. and H.A.P.; manuscript writing, A.S.M., V.R.F.F., E.C.S.B. and H.A.P.; review and editing, T.S., A.S.M., E.C.S.B., S.C.M. and R.L.H.; visualization, T.S., V.R.F.F., S.C.M. and R.L.H.; supervision, T.S.; project administration, A.S.M. and T.S.; financing acquisition, T.S. All authors read and agreed with the published version of the manuscript.

#### Use of artificial intelligence tools

The authors declare that no artificial intelligence tools were used in the composition of the manuscript "Prevention of sexually transmitted infections in gay men: social representations study".

