




RISKY SEXUAL BEHAVIORS IN UNIVERSITY STUDENTS ON THE AMERICAN CONTINENT

COMPORTAMENTOS SEXUAIS DE RISCO EM ESTUDANTES UNIVERSITÁRIOS NO CONTINENTE AMERICANO

CONDUCTAS SEXUALES DE RIESGO EN ESTUDIANTES UNIVERSITARIOS DEL CONTINENTE AMERICANO

 <https://doi.org/10.56238/isevjhv4n6-001>

Receipt of originals: 05/10/2025

Acceptance for publication: 05/11/2025

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ABSTRACT

Introduction: Sexuality is determined by multiple factors. The knowledge and perceptions of the individual's environment will determine their behavior in this regard. Identifying the perceptions in a population that attends higher education is important to carry out specific prevention activities, since the repercussions of their sexual behavior are decisive for the public health of populations. Objective: Determine what are the perceptions and the main sexual risk behaviors in American university students. Method: Systematic review. The search was carried out in the Cochrane, Medigraphic and PubMed databases with the search words sexual behavior, college students, finding 25,821 results, filtered by language (English or Spanish), access to full text, year of publication (2016- 2021), geographic area (American continent) and sample (university population), resulting in n=12 articles. Results: most of the authors agree that American university students, despite having knowledge regarding sexuality and Sexually Transmitted Infections (STIs), do not carry out preventive actions, with a beginning of sexual life approximately at the age of fifteen and multiple partners. simultaneous; condom use is predominant as a method of family planning and sexting as a risky sexual behavior has become more important in recent years. Conclusions: the high prevalence of risk behaviors and the low use of diagnostic tests supports the fact that America is one of the continents with the most annual diagnoses of STIs in the world, with consequences that can be of varying severity and even fatal.

Keywords: Sexual Behavior. University Students. Perceptions of Sexuality.

RESUMO

Introdução: A sexualidade é determinada por múltiplos fatores. O conhecimento e as percepções do ambiente do indivíduo determinarão seu comportamento a esse respeito. Identificar as percepções em uma população que frequenta o ensino superior é

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importante para realizar atividades específicas de prevenção, uma vez que as repercussões de seu comportamento sexual são decisivas para a saúde pública das populações. Objetivo: Determinar quais são as percepções e os principais comportamentos sexuais de risco em estudantes universitários americanos. Método: Revisão sistemática. A busca foi realizada nas bases de dados Cochrane, Medigraphic e PubMed com as palavras-chave comportamento sexual, estudantes universitários, encontrando 25.821 resultados, filtrados por idioma (inglês ou espanhol), acesso ao texto completo, ano de publicação (2016-2021), área geográfica (continente americano) e amostra (população universitária), resultando em n = 12 artigos. Resultados: a maioria dos autores concorda que os estudantes universitários americanos, apesar de terem conhecimento sobre sexualidade e Infecções Sexualmente Transmissíveis (ISTs), não realizam ações preventivas, com início da vida sexual aproximadamente aos quinze anos e múltiplos parceiros. Simultaneamente, o uso de preservativo é predominante como método de planejamento familiar, e o sexting, como comportamento sexual de risco, tornou-se mais importante nos últimos anos. Conclusões: a alta prevalência de comportamentos de risco e a baixa utilização de testes diagnósticos corroboram o fato de a América ser um dos continentes com maior número de diagnósticos anuais de ISTs no mundo, com consequências que podem ser de gravidade variável e até fatais.

Palavras-chave: Comportamento Sexual. Estudantes Universitários. Percepções de Sexualidade.

RESUMEN

Introducción: La sexualidad está determinada por múltiples factores. Los conocimientos y percepciones del entorno del individuo determinarán su comportamiento al respecto. Identificar las percepciones en una población que asiste a la educación superior es importante para llevar a cabo actividades específicas de prevención, ya que las repercusiones de su comportamiento sexual son decisivas para la salud pública de las poblaciones. Objetivo: Determinar cuáles son las percepciones y los principales comportamientos sexuales de riesgo en estudiantes universitarios estadounidenses. Método: Revisión sistemática. La búsqueda se realizó en las bases de datos Cochrane, Medigraphic y PubMed con las palabras de búsqueda comportamiento sexual, estudiantes universitarios, encontrando 25,821 resultados, filtrados por idioma (inglés o español), acceso a texto completo, año de publicación (2016- 2021), área geográfica (continente americano) y muestra (población universitaria), resultando n=12 artículos. Resultados: la mayoría de los autores coinciden en que los universitarios americanos, a pesar de tener conocimientos sobre sexualidad e Infecciones de Transmisión Sexual (ITS), no realizan acciones preventivas, con un inicio de la vida sexual aproximadamente a los quince años y múltiples parejas. simultáneas; predomina el uso del preservativo como método de planificación familiar y el sexting como conducta sexual de riesgo ha cobrado mayor importancia en los últimos años. Conclusiones: la alta prevalencia de conductas de riesgo y el escaso uso de pruebas diagnósticas avalan que América sea uno de los continentes con más diagnósticos anuales de ITS del mundo, con consecuencias que pueden ser de diversa gravedad e incluso mortales.

Palabras clave: Comportamiento Sexual. Estudiantes Universitarios. Percepciones de la Sexualidad.



1 INTRODUCTION

Perception is recognized as an "inner sensation resulting from ideas or knowledge obtained from the bodily senses" (Royal Academy of the Spanish Language S.F.). These mental representations of external reality will give rise to behaviors (Oviedo, 2004). Under this concept, the appreciation of an individual is given by the stimuli that surround him and the situated reality will give rise to specific ideas and behaviors, this taken to the sexuality of young people determines to a large extent their health.

In addition, the multiple consequences on reproductive health also represent a public health problem. This analysis presents the findings in this area in university students, due to their educational level, better knowledge and practices would be expected, despite this, the environment in which they develop is still considered risky. Identifying the problem at this academic level will help to implement interventions that promote the acquisition of adequate knowledge and therefore a better quality of life for students.

Issues related to sexuality, perceptions and behaviours can have an impact on the life and development of the human being in different areas, factors such as geographical space, availability of natural and health resources, limited access to economic resources and social conditions such as poverty, educational level, inequality and discrimination determine the reality of individuals, predisposing them to attitudes and behaviors that are not always positive or beneficial, such as unwanted pregnancies, sexually transmitted infections (STIs), health complications such as infertility, maternal-fetal morbidity and mortality, susceptibility to various types of cancer, emotional disorders, social stigmas and increased risk of contracting the Human Immunodeficiency Virus (HIV). Although the use of condoms is essential to prevent these infections, many adolescents are reluctant to use them, as they consider that they are not very vulnerable to infection. Even 7-9% of total annual mortality is related to this type of disease. (World Health Organization [WHO], 2022).

Among the behaviors considered to be of greater risk in the sexuality of individuals are the lack of attachment or incorrect use of contraceptive methods, promiscuity and little knowledge about basic concepts in reproductive health. As Sousa, et al (2024) mention, despite the fact that the use of condoms is essential to prevent these infections, many adolescents show resistance to using them, as they consider that they are not very vulnerable to infection. This can be seen reflected in indicators such as adolescent fertility

in some countries such as Mexico, where the birth rate for women aged 15 to 19 is 73/1,000 inhabitants (the world rate is 40/1,000). This high figure has been related to educational lag and lack of access to health services (Gómez & González, 2018). It is important since those women who have children before finishing their higher education do not usually complete them, in addition to being socially rejected. In general, these young women belong to a low socioeconomic stratum, rural areas or indigenous groups. It has also been documented that the early onset of an active sexual life, as well as the lack of knowledge of contraceptive methods, is usually more common in men (Villalobos et al, 2017). Thus, although the male condom is the most commonly used, many users believe that it can be reused and are unaware that they do not protect them from STIs (Rojas et al, 2017).

When it comes specifically to STIs, the groups considered most vulnerable by the WHO are mobile populations, homeless people (especially children and adolescents), people with drug addiction, those living in riot zones, and prisoners. Therefore, the distribution of communicable diseases is greater in regions with low socioeconomic resources, estimating that by 2012, of the 357 million people with STIs, the vast majority were located in the Western Pacific area (142 million), the Americas (64 million) and the African area (63 million), with trichomoniasis, gonorrhea and those caused by *Chlamydia trachomatis*, the most frequent. Among viral STIs, the predominant STIs are those caused by herpes simplex virus, human papillomavirus (HPV), and HIV (WHO, 2016).

Among the main risk factors for sexual inappropriate behaviors are the following:

- Very frequent alcohol consumption; a behavior that enhances disinhibition and risky sexual behavior. Taken together, these statistics underscore the importance of analyzing risky sexual behaviors from a public health perspective. Likewise, the intake of alcohol and other drugs as psychoactive substances reduces inhibition and judgment. It has been proven that alcohol intake prior to sexual encounter is associated with less use of barrier methods. Studies suggest that these substances may mediate the relationship between consumption and having multiple sexual partners (Cooper, 2002).
- Inconsistent condom use: Correct and consistent condom use is low. For example, a recent multicenter study found that only 39.4% of college students reported consistent condom use. This is consistent with findings that about half of the students had sex without a condom at their last encounter.



- **Multiple sexual partners:** Relationships with multiple partners are common. In the same study, 31.4% of students reported having had multiple sexual partners in the previous year. This pattern significantly increases the risk of transmission of infections.
- **Social pressure and university environment:** The atmosphere of parties, student residences and the so-called "hookup culture" pressure many young people to participate in casual relationships. The media and peers promote the normalization of informal sexual encounters, which can decrease the perception of individual risk
- **Other risk factors:** In addition, many young people engage in casual sex or in the context of parties or concerts, where planning is less. Studies suggest that 42% of college students participate in "binge drinking" activities, which increases the likelihood of impulsive and unprotected sex.
- **Lack of comprehensive sex education:** Many students arrive at college without having received enough sex education. The absence of formal programs on campus leaves gaps in knowledge about contraceptive methods and STI prevention. In fact, studies have shown that the introduction of peer-to-peer educational programs in universities significantly increases condom use and HIV testing among students. Lack of training keeps young people ill-informed and less prepared to protect themselves.
- **Mental and emotional health:** Problems such as stress, anxiety or low self-esteem can affect sexual behavior. Some young people use sexual activity as a means of coping or seeking emotional validation, behaving impulsively. For example, there are associations between moderate depressive symptoms and a greater propensity for risky sexual behaviors.
- **Other factors:** Easy access to online dating apps can encourage quick hookups without enough planning. The stability of the relationship (casual versus consolidated couples) and the level of trust in the couple also play a role, since with short partners the use of protection is lower.

2 OBJECTIVE

To determine what are the perceptions and main sexual risk behaviors in American university students.



3 METHODOLOGY

It was a systematic review, articles published in the period 2016-2023 were selected, with the keywords; perception, sexual behavior, university students in the search engines Cochrane, Medigraphic and PubMed, finding n=25821. The search included titles, abstracts, and keywords. The selected articles were published from the aforementioned period. A systematic review consists of a structured compilation of all empirical evidence, which meets certain inclusion criteria and responds to a clearly defined clinical research question, its execution involves several critical phases; (PICO model); exhaustive search in multiple databases (PubMed, Cochrane, Scopus, among others), selection of relevant studies, evaluation of methodological quality, data extraction and synthesis of results. Where possible, the extracted data can be statistically analysed using meta-analyses, allowing a joint effect to be estimated and the accuracy of conclusions to be increased. In addition, systematic reviews play a crucial role in the prevention of research duplication and in the optimization of resources, since they guide future studies towards real knowledge gaps. Currently, international organizations such as the WHO, NICE and CDC use these studies as the basis for their health guidelines.

The systematic review represents a backbone in the pyramid of scientific evidence. From the perspective of the health researcher, its realization requires methodological rigor, critical thinking and ethical commitment. In a world saturated with information, systematic reviews allow the most reliable knowledge to be filtered and organized to guide effective actions in public health. Its correct application not only improves medical practice, but also strengthens health systems by basing decisions on solid and reproducible data.

In the field of public health, evidence-based decision-making is essential for designing effective policies, allocating resources, and establishing clinical guidelines. In this context, the systematic review has established itself as a fundamental methodological tool for synthesizing the available scientific knowledge. Unlike narrative reviews, systematic reviews employ a rigorous, transparent, and replicable approach that minimizes bias, allowing the efficacy and safety of health interventions to be objectively assessed, as well as identifying gaps in research.



3.1 SELECTION CRITERIA

Only scientific studies that addressed the indicated topic were considered, specifying: a) sample of university students b) belonging to the American continent c) availability of full article d) study available in indexed and refereed journals.

3.2 SELECTION OF ARTICLES

Only those made in the American continent and in the English or Spanish languages were selected, finding $n=786$ records, then the abstract was read and if there was any doubt about its usefulness, the article was read in its entirety. The replicated items were eliminated, those that did not allow full access to and those whose sample did not correspond to university students or the designated geographical area (America), subtracting $n=11$, adding $n=1$, reference of one of the analyzed articles, the selection processes were detailed with the help of the online diagramming tool PRISMA (Preferred Reporting Items for Systematic reviews and MetaAnalyses), this is represented in Figure

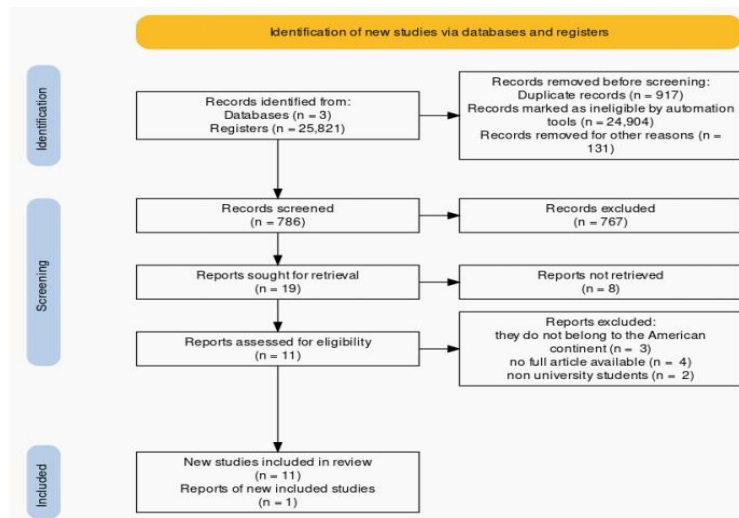
1. The type of article, year and country of production are specified in Table 1.

3.3 DATA ANALYSIS

The review of the articles by title and abstract was carried out by TAJP and ICP, later the rest of the authors verified the usefulness of the selected articles. The samples and methodology of each study are different; The topic addressed may have multiple points of view given the geographical area in which it was carried out, so it was decided not to carry out a quantitative analysis.

Figure 1

Phases of the search protocol process: systematic review



4 RESULTS

Table 1 presents the articles selected in this study.

Table 1

Articles selected in this study

Table 1. Selected Articles

Article	Year	Methodology	Country	Autor
Conocimientos sobre VIH/sida, percepción de riesgo y comportamiento sexual en estudiantes universitarios.	2016	Descriptive	Cuba	Rosabal et al.
Conocimiento sobre el VIH/Sida en estudiantes de Odontología de la Universidad de Guayaquil	2017	Descriptive	Ecuador	Real et al.
Conductas sexuales de riesgo en adolescentes estudiantes de primer año de pregrado de la Universidad San Sebastián: Estudio transversal	2017	Descriptive	Chile	Bouniot et al, 2017
Sexual risk behavior differences among sexual minority high school students — united states, 2015 and 2017	2018	Descriptive	E. U	Raspberry et al.
Salud sexual y reproductiva en universitarios	2018	Descriptive	México	Mandujano et al.
Conductas sexuales de riesgo y actividades preventivas frente al cáncer de cuello uterino en mujeres universitarias vacunadas frente al VPH	2018	Descriptive	México	Fernández et al.
Conducta sexual y realización de la prueba del virus de la inmunodeficiencia humana en jóvenes que estudian en la universidad en cuzco (Perú)	2018	Descriptive	Perú	Paz et al.
Self-perception of self-care skills in university students concerning chronic diseases	2019	Correlational	México	Rivas et al.
Risky sexual behavior and associated factors in undergraduate students in a city in southern Brazil	2019	Descriptive	Brasil	Dalmas et al.
Associations among negative urgency, sensation seeking, alcohol use, self-esteem, and casual sexual behavior for college students	2019	Correlational	E. U	Longo et al.

Diferencias en los estilos de negociación sexual y autoeficacia en el uso del condón en hombres y mujeres universitarios de Querétaro, México, 2018	2020	Descriptive	México	Palacios y Ortega
Impulsividad, consumo de alcohol y conductas sexuales riesgosas en estudiantes universitarios	2021	Correlational	Argentina	Leonangeli et al.
Construcción y validación de tres instrumentos para evaluar sexting en jóvenes mexicanos	2021	Correlational	México	Quezada y Robles

4.1 RISKY SEXUAL BEHAVIOR

Longo et al (2019) found that sexual impulsivity is associated with alcohol consumption and low self-esteem in college students, just like Gräf et al (2020), those with high self-esteem have fewer behaviors associated with casual sex. Still, nearly half of its population has sexual encounters with people who aren't their romantic partners, and a quarter have had sex with strangers. In general, men perform sexual acts with strangers more frequently (Bouniot et al, 2017). In some studies, the average number of sexual partners in university students is 3 (Palacios & Ortego, 2020), regardless of their sexual orientation.

According to the findings of Rasberry et al (2018), sexual orientations other than heterosexuality are minorities with a high risk of STIs and a high prevalence of risky sexual behaviors. In addition, they reported that, among the university students studied, those who were unsure of their sexuality or were bisexual started their sexual life more frequently before the age of thirteen, had more than four sexual partners and had never been tested for HIV. In this last aspect, in some Latin American populations the percentage of performing these tests is higher, because they have had unprotected sexual acts or because of the intention to donate blood (Gräf et al, 2020), despite this, another study in university students of the medical career showed much lower percentages, although they are aware of carrying out risky sexual behaviors. they did not consider it necessary to perform such a test (Mandujano et al, 2018).

The risk behaviors described above were more frequent in women than in men. Contrary to what was found in non-heterosexuals, risk behaviors tend to be more frequent in men than in women (Longo et al, 2019; Gräf et al, 2020). The age of onset of sexual life in the Latin American university population is generally less than or equal to 15 years (Palacios & Ortego, 2020; Gräf et al, 2020; Fernández et al, 2018). In terms of the type of sexual intercourse performed, the most frequent are usually vaginal and oral (Palacios & Ortego, 2018; Bouniot et al, 2017). In general, anal intercourse occurs in just under one-fifth of the sexually active population (Palacios & Ortego, 2020; Gräf et al, 2020).

Sexting, defined as the action of creating and distributing explicit sexual content, has gained strength in recent years as risky sexual behavior (Courtice & Shaughnessy, 2021). Given the changes in daily life caused by the pandemic, this form of sharing sexuality has become popular among young people, as found by Quezada and Robles (2021) and Gräf et al (2020), more than three-quarters of the population studied has practiced sexting, with women being the senders and men the receivers; all of the latter received and sent explicit sexual content. 2% of the recipients of this content were someone considered trustworthy and at least 7% had the material leaked. These behaviors are striking since their leaking without the author's consent can imply legal repercussions for those who disseminate them and problematic emotional disorders for those who are exposed, considering it cyberbullying. (Fajardo et al, 2013; Courtice & Shaughnessy, 2021).

4.2 USE OF BARRIER CONTRACEPTIVE METHODS

University youth represents a key stage in the sexual and reproductive development of individuals. During this period, many young people explore their sexuality more freely, but they also face risks related to unplanned pregnancies and sexually transmitted infections (STIs). In this context, the use of sexual planning methods becomes relevant not only at the individual level, but also from a public health perspective. Although there have been advances in access to and knowledge about contraception in recent decades, significant challenges remain related to proper use, sex education, and sociocultural barriers.

One of the main behaviors found was the lack of adherence to the use of condoms to prevent pregnancy and not to avoid STIs (Real et al, 2017; Dalma et al, 2019, Rasberry et al 2018). As found by Rosabal et al (2016), less than half of university students used condoms in their first sexual intercourse, with more than two sexual partners in the year, this was also observed in the study by Mandujano et al (2018). Gay or bisexual women tend to use condoms less often than men (Rasberry et al, 2018). These results are similar to those found by Gräf et al (2020), Mandujano et al (2018), and Bouniot et al (2017), who found that almost half of the students did not use a condom in their last sexual intercourse and a quarter of them have more than one sexual partner simultaneously.



In another Latin American population, it was observed that women who do not have HPV immunization tend to engage in risky sexual behaviors relatively more frequently, not using a condom with a new partner, for example (Fernández et al, 2018). Despite this, women are usually the ones who request the use of condoms and avoid sexual relations if their partner does not want to use it (Palacios & Ortego, 2020).

4.3 USING FAMILY PLANNING METHODS

Currently, there is a wide range of contraceptive methods available to university students, including barrier methods (such as condoms), hormonal methods (pills, patches, injections), intrauterine devices (IUDs), as well as methods of

emergency and voluntary abstinence. Various studies have shown that condoms are still the most widely used method among young people, in part because of their dual function: preventing pregnancy and STIs. According to the American College Health Association (ACHA), more than 50% of sexually active students report using condoms in their relationships, although their use is not always consistent or correct.

Hormonal methods are also popular, especially among women who are seeking greater control and autonomy in their reproductive health. However, their use requires discipline, accurate medical information, and constant access to health services, which is not always guaranteed. Factors such as cost, stigma, lack of health insurance, or misinformation can limit access to these methods, especially in universities where there are no well-equipped student clinics or essential services.

Sex education also plays a crucial role in the adoption of planning methods. In many cases, students arrive at university without adequate training in sexual and reproductive health issues. This leads to confusion, myths, or mistrust of certain birth control methods. Some universities have implemented comprehensive sex education programs, awareness campaigns, and free condom distribution, which have been shown to increase the correct use of protective methods and reduce risky behaviors.

However, decision-making about contraception depends not only on knowledge or access, but also on emotional, cultural and relational aspects. Partner pressure, the influence of alcohol, and personal beliefs about sexuality continue to be barriers to effective sexual planning among college students

4.4 KNOWLEDGE OF RISK BEHAVIORS

Regarding the perception of self-care in their sexual behavior, Rivas et al (2019) found that nutrition and medicine students showed a better self-perception than biology and nursing students, these results are similar to those obtained by Mandujano et al (2018) who found that medical students consider themselves to have a high knowledge on this subject, despite this, almost half of them reported having irresponsible behaviors, similar to what was declared by Cuban university students in the study by Rosabal et al (2016), who described that three-quarters of the population perceived themselves as irresponsible in the self-care of their reproductive health.

5 DISCUSSION

The review suggests how multiple factors can condition or promote risky attitudes and behaviors, including emotional state is usually linked to self-esteem and self-care, which has been a relevant factor already studied in the literature (Auquilla, 2021), pointing out that those who belong to dysfunctional homes are more susceptible to emotional disorders, they are at higher risk of STIs and unwanted pregnancies, and even tend to start their sexual life at an early age. The latter risk behavior was found by multiple authors in the study (Longo et al, 2019; Palacios & Ortego, 2020; Gräf et al, 2020; Fernández et al, 2018).

In a study carried out among Colombian university students, it was reported that 63% of those surveyed began their sexual life before turning 18 years old. Likewise, 87% have been involved at least once in sexual behaviors considered risky, such as having vaginal intercourse without the use of a condom (73%), practicing unprotected oral sex (60.3%), having sex with multiple partners (66.2%), and having unplanned sexual encounters (54.4%) (Anderson, et al, 2020; Badillo-Viloria, et al, 2020).

Regarding alcohol consumption linked to sexual impulsivity, this relationship has also been documented in university students from other countries (Saeteros et al, 2013), not only associated with the performance of the sexual act without a condom, but also increasing the frequency of sexual abuse in women, most of which was carried out by men (Redondo et al, 2021). Behaviors such as having casual sex (including encounters with sex workers) have been found more frequently in men (Saeteros et al, 2013), which coincides with the literature analyzed. Studies conducted over the past two decades have found similar results in terms of inconsistency in condom use, a higher likelihood of not using condoms in relation to alcohol intake, and the presence of multiple sexual partners

(Desiderato & Crawford, 1995; Caico, 2014), which coincides with the findings of this review.

In reference to sexting, it has been pointed out that its high frequency predicts risky sexual behaviors in young people (Hicks et al, 2021). Although it can currently be considered as a way of dealing with the lack of physical contact, its high prevalence has a diverse underlying problem (Mestre et al, 2020), as it not only influences areas such as sexual identity and behaviour, but also legal issues ranging from cyberbullying to the distribution of illegal content. In addition to being related to emotional disorders (Barrense et al, 2017; Raine et al, 2020). According to what was found, this practice is frequent in the U.S. population and its repercussions can be observed in the short term, its frequency has increased along with the advancement of technology and the needs of the population during the pandemic (Ibarra et al, 2020), since before the prevalence of its practice was 30 percentage points lower (Hicks et al 2017).

Misconceptions about HIV are common, stigmas related to this disease are still common even among health personnel (Solís et al, 2020), a situation due to the lack of knowledge regarding its transmission routes, a fact supported by the data reported by Rosabal et al, 2016. In Asian university students, it has been detected that, despite having the possibility of performing diagnostic tests for HIV, they decide not to do them; this is linked to insufficient knowledge about prevention and open sexual attitudes (Yang et al, 2021). In the case of Latin American students, the situation is similar.

Male college students who have casual sex have a high degree of openness in sexual attitudes. Only a third of Asian university students who have casual sex use condoms in all their encounters, with the high possibility of STI infections being alarming (Yang et al, 2021), this percentage is lower than that found in most of the US literature considered in the study (Real et al, 2017; Dalma et al, 2019; Rasberry et al 2018; Rosabal et al, 2016; Bouniot et al, 2017), despite this, sexual minorities generally have more open positions on sexuality, similar to what was found by Yang et al, 2021; Balám, et al, 2019).

It is usually women who present greater self-care for the prevention of STIs (Palacios & Ortego, 2020), this fact has already been previously documented by other authors (Herrera et al, 2013). In addition, as in the present analysis, the literature agrees that it is women who have most frequently mentioned using a family planning method, the most frequent being condoms and the contraceptive pill (Saeteros et al, 2013).

A common finding in this analysis corresponded to university students who do not consider that they have risky sexual attitudes despite carrying out these practices (Gräf et al, 2019; Fernández et al, 2018, Mandujano et al, 2018), this fact is similar to that found in Nigerian students, although the latter study considers a population of younger age and educational level (Odeigah et al, 2019). In another study carried out in Mexico, it was found that the older they are and after having started their sexual life, they tend to have more knowledge about this subject. Knowledge of STIs was considered higher based on U.S. students' self-perception, yet few choose to undergo diagnostic testing. This has also been mentioned by other authors, pointing out that most university students who have extensive knowledge on this topic are those who have already been diagnosed with an STI (Wayas et al, 2019; Balan et al, 2019), in addition, in other populations, knowledge is associated with greater diagnostic testing, different from that found in American populations.

In a study carried out in France on adolescents, it was found that poor knowledge regarding sexuality and STIs is related to poor parental communication, low socioeconomic status of parents and lack of health education. Given the multiplicity of countries, it is not possible to make statements about the socioeconomic level of those studied or the educational level of their parents.

In summary, although sexual planning methods are more widely available and accepted than in the past, their use among college students still faces significant challenges. It is critical to strengthen comprehensive sexuality education, ensure equitable access to contraceptives, and create university environments where young people can make informed and safe decisions about their sex lives. Only through a multidimensional approach — including health, education, and emotional well-being — can responsible and healthy sexuality be promoted at this vital stage of human development.

Some university students only identify the male condom and pills (without being able to specify which) as family planning methods (Real et al, 2017). Among those who are bisexual, the use of sexual planning methods is low, despite having partners of the opposite sex (Rasberry et al, 2018).

The most commonly used planning method is pills, followed by coitus interruptus; the percentage of use of family planning methods in certain populations is less than 50% (Gräf et al, 2020). It is common for the condom to be the most used method since it is



identified by students as the safest to avoid pregnancy (Mandujano et al, 2018), followed by abstinence. Women are the ones who report using this type of therapy more frequently, despite the low percentages (Bouniot et al, 2017).

The public health consequences of these sexual behaviors are: STIs and HIV, unplanned pregnancies, economic impact on the health system and impact on student well-being.

6 CONCLUSIONS

- According to the literature, university students are not a specific risk group, however, risky sexual behaviors are highly prevalent in this group, which supports the fact that America is one of the continents with the highest STI diagnosis in the world and their respective consequences can be of varying severity and even fatal.
- Risky sexual behavior is more frequent in men, those who consume alcohol and is more frequently related to emotional disorders.
- It is common for university students to have more than one sexual partner simultaneously
- The onset of active sexual life in American college students is approximately at the age of 15.
- Women tend to have more behaviors associated with self-care of their sexuality and seek the use of family planning methods.
- The contraceptive method of choice for American college students is condoms and birth control pills. Despite this, they are used infrequently, which increases the risk of unwanted pregnancies and STIs. The most frequent type of sexual intercourse is vaginal.
- The sexual behavior of minorities must be studied in greater depth, since they have been detected as a population at risk, as an earlier onset of sexual life and lack of adherence to contraceptive measures and protection during sexual intercourse have been observed.
- In the current context, sexual practices in which technologies intervene are frequent and have multiple repercussions, increasing the risk of suffering emotional disorders and developing risky sexual behaviors and even having legal responsibilities for their use and distribution. It is important that users are aware of

these repercussions in order to carry out these practices or reduce them if necessary.

- Access to diagnostic tests should be simplified and expanded, and awareness-raising campaigns could go a long way toward reducing the impact of risky sexual behaviors on public health.
- Although most students consider themselves to have a high level of knowledge about sexuality and STIs, many of them do not identify the risky sexual behaviors they carry out, nor do they carry out preventive or diagnostic actions in accordance with the behaviors of other populations with greater knowledge on the subject.
- In summary, risky sexual behaviors are frequent in the university population and pose significant challenges to public health. The high number of sexual partners, the low use of barrier methods and the influence of psychoactive substances increase the transmission of STIs and unplanned pregnancies, with serious medical and social consequences. Given this, it is crucial to combine strategies: comprehensive sex education, easy access to contraceptives, and confidential clinical services on campuses. Evidence-based programs (both school and university) have been shown to reduce these risky behaviors. Ultimately, early and comprehensive intervention—involving students, academic staff, and health services—can lessen the burden of these behaviors on the health system and improve student well-being.

7 PROPOSALS IN UNIVERSITIES

To counteract these risks, many universities have implemented proactive measures in sexual health. For example, comprehensive educational programs – talks, workshops, and digital resources – are often offered in welcome courses and campus health services. These programs teach sexual negotiation skills, correct condom use, and encourage regular medical testing. Awareness campaigns are also promoted on social networks and posters. Thus, sex education is accompanied by the provision of practical resources (free condoms, tests, contraceptives).

- Free condom dispensers: Several colleges place machines or dispensers in bathrooms and student health centers. A study at the University of North Carolina showed that after installing such dispensers, 23% of students surveyed removed

at least one condom and, among those who were sexually active, 33% used these free condoms. These initiatives make access to protection tangible without cost or shame (Lewis, et al, 2009).

- Peer education: Many campuses have groups of student volunteers who are trained to inform their peers. Systematic reviews indicate that peer-led sexuality education programmes are effective in raising knowledge and promoting behaviour change: they increase condom use and STD/HIV testing among participants.

Being

peers of the same generation, the information transmitted is closer and more credible (UNESCO, 2009)

- Comprehensive sexual health services: University health centers offer confidential STI testing, vaccinations (e.g., HPV), oral or emergency contraception, and counseling. Some universities have innovated with special campaigns; for example, the University of Miami launched free monthly STI testing on campus in 2022, in collaboration with the state health department, to facilitate access without the need to bill family insurance (University of Miami, 2022). These tests and the availability of prompt treatment help detect infections early and reduce infections.

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