

**HIV/AIDS EPIDEMIC IN 2022: A DESCRIPTION ON THE KNOWLEDGE OF
UNIVERSITY STUDENTS****EPIDEMIA DE HIV/AIDS EM 2022: UM DESCRITIVO SOBRE O
CONHECIMENTO DE UNIVERSITÁRIOS****EPIDEMIA DE VIH/SIDA EN 2022: UNA DESCRIPCIÓN SOBRE EL
CONOCIMIENTO DE ESTUDIANTES UNIVERSITARIOS**

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ABSTRACT

Objective: to assess the level of knowledge of university students about HIV/AIDS. **Method:** exploratory, quantitative-descriptive study, with the university population using an online questionnaire formulated in Google Forms, containing 31 questions about knowledge involving HIV/AIDS. **Results:** the final sample consisted of 127 analyzed questionnaires, the population being predominantly female (73.2%), white (85.8%), single/legal separation (54.4%), from the areas of biological and health (62.2%), aged between 20 and 25 years, who have an active sex life (81.9%), use condoms during sexual intercourse (63%) and who have not had any STIs (83, 5%). **Discussion and Conclusion:** most of the participants have knowledge about the forms of transmission and protection, but even so, it was noted that there are occasional doubts, with no association of this knowledge with safe sexual behavior, requiring the construction of new methodologies on sex education.

Descriptors: Acquired Immunodeficiency Syndrome (HIV/SIDA); College students; Knowledge; Health education; sexual health.

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RESUMO

Objetivo: aferir o nível de conhecimento de universitários sobre HIV/AIDS. **Método:** estudo exploratório, quantitativo-descritivo, com a população de universitários utilizado um questionário online formulado no Google Forms, contendo 31 perguntas sobre os saberes envolvendo HIV/AIDS. **Resultados:** amostra final foi constituída por 127 questionários analisados, sendo a população predominantemente do sexo feminino (73,2%), cor branca (85,8%), solteiros/separação legal (54,4%), das áreas de biológicas e saúde (62,2%), com a faixa etária entre 20 a 25 anos, que possuem vida sexual ativa (81,9%), fazem uso de preservativos nas relações sexuais (63%) e que não tiveram alguma IST (83,5%). **Discussão e Conclusão:** grande parte dos participantes têm conhecimento sobre as formas de transmissão e proteção, mas ainda assim, notou-se que existem dúvidas pontuais, não havendo associação desses conhecimentos com comportamentos sexuais seguros, sendo necessária a construção de novas metodologias sobre educação sexual.

Descritores: Síndrome da Imunodeficiência Adquirida (HIV/AIDS); Universitários; Conhecimento; Educação em Saúde; Saúde Sexual.

RESUMEN

Objetivo: evaluar el nivel de conocimiento de estudiantes universitarios sobre el VIH/SIDA. **Método:** estudio exploratorio, cuantitativo-descriptivo, con población universitaria a través de un cuestionario en línea formulado en Google Forms, que contiene 31 preguntas sobre conocimientos relacionados con el VIH/SIDA. **Resultados:** la muestra final estuvo constituida por 127 cuestionarios analizados, siendo la población predominantemente femenina (73,2%), blanca (85,8%), soltera/separada legal (54,4%), de las áreas de biológico y salud (62,2%), con edades entre 20 y 25 años, que tienen vida sexual activa (81,9%), usan preservativo durante las relaciones sexuales (63%) y que no han tenido ninguna ITS (83,5%). **Discusión y Conclusión:** la mayoría de los participantes tiene conocimientos sobre las formas de transmisión y protección, pero aun así, se notó que existen dudas ocasionales, sin asociación de estos conocimientos con conductas sexuales seguras, requiriendo la construcción de nuevas metodologías sobre sexo educación.

Descriptor: Síndrome de Inmunodeficiencia Adquirida (HIV/AIDS); Estudiantes universitarios; Conocimiento; Educación para la salud; salud sexual.

INTRODUCTION

The Human Immunodeficiency Virus (HIV), which causes the clinical condition known worldwide as Acquired Immunodeficiency Syndrome (AIDS), causes a drop in immunity, leading to the emergence of other diseases such as viral hepatitis, tuberculosis, pneumonia, toxoplasmosis and some types of cancer. The first cases were detected in 1981 in the United States of America. In Brazil, records began in 1982 and in the same decade the

epidemic took shape, spreading from the Center-South region to the rest of the Brazilian territory.^{1,2}

The evolution of the HIV/AIDS epidemic can be analyzed in three periods: until 1986, where the forms of transmission were sexual, between partnerships with men who have sex with men (MSM) and through blood transfusion; in the late 1980s and early 1990s, the most recurrent form of infection was through the use of injectable drugs; from the early 1990s to the present

day, transmissions predominantly come from unprotected heterosexual practice, infecting mainly women, in addition to demonstrating a spread to the interior parts of the country.^{2,3,4}

Bringing this approach to the reality of youth (between 15 and 24 years old), the number of HIV/AIDS cases in Brazil from 2007 to July 2021 was 67,350 thousand, with the total number of notifications in SINAN being 381,793, of which approximately 69.8% were men and 30.2% were women. This is due to the lack of adaptation of sexual and reproductive health services to the specific needs of youth – which increases treatment failure in this age group, stigma and discrimination from health professionals, and restrictive laws and policies, such as the age of consent for serological testing.⁵

In this context, social protection measures and keeping adolescents in school can reduce the risk of HIV infection. Schools are an important vehicle for sexuality education, which provides adolescents and young people with the knowledge and skills they need to make informed, healthy and respectful choices about their relationships and sexuality.⁶

Even though there are campaigns, especially in the media, these are lacking in instructions. Added to this, the fear and

discrimination suffered by people living with AIDS end up discouraging the population from seeking diagnosis and treatment centers.^{2,4,7,8,9,10,11}

The importance of this research is justified by the knowledge and awareness of the young population about the HIV virus, so that the importance of prevention can be promoted, since currently HIV/AIDS is still a taboo for many university students who, due to lack of information, contract the disease and often do not know the reason or how to confirm the diagnosis, causing the progression of the virus, if treatment is not started early and, consequently, with a greater chance of complications and death.

Therefore, the aim is to harm the level of knowledge of university students about HIV/AIDS, in light of knowledge about the forms of transmission, prevention, protection and health services in the region where diagnosis and treatment are carried out.

MATERIAL AND METHODS

This was an exploratory, quantitative-descriptive study, conducted on Google Forms, made available on social media and WhatsApp groups through a link to the questionnaire, which was completed online (requiring internet access), 31 objective and essay questions organized by

nominal value, focused on basic knowledge about forms of transmission, prevention, health services indicated for diagnosis and treatment of this sexually transmitted infection, in addition to personal questions. The questionnaire sent was divided into 4 stages, first stage - sociodemographic and economic variables, second stage - variables for assessing sexual behavior, third stage - variables for assessing knowledge of forms of transmission, fourth stage - variables for assessing knowledge of forms of protection.

Data collection was carried out after approval by the UNISAGRADO Research Ethics Committee, with the link: <https://forms.gle/ahQWnH7vSTxKkT8BA> being available for 15 days in 2022 for the target population of male and female Higher Education undergraduates aged over 18. The variables explored for the inclusion criteria were: student age, gender, ethnicity, socioeconomic aspects such as residential location, family income, frequent sexual relations, condom use, general knowledge of transmission methods, prevention methods, treatments and specialized health services for Sexually Transmitted Infections.

RESULTS

The sample consisted of 127 university students who responded to the

online questionnaire, the majority of whom were female 93 (73.2%), white 109 (85.8%), with a population distribution greater in the city of Bauru/SP and age range between 20 and 25 years. There was a predominance of single individuals/legal separation 69 (54.4%), followed by married/serious relationship 56 (44.1%) and open relationship 2 (1.6%), there was a prevalence in the areas of biological/health 79 (62.2%), other areas such as exact, human and applied social sciences 48 (37.8%), who live with their guardians 66 (52%), alone 26 (20.4%), republic 15 (11.8%), located in urban area 123 (96.9%). It is worth noting that a large number of participants have a middle socioeconomic class, as the vast majority reported a family income between 1 and 6 minimum wages.

In Table 1, when asked about having sexual intercourse without using condoms, it was highlighted that the main reasons for NOT using them were being married or in a stable relationship, thus showing trust in the partner, discomfort with the condom, having better sexual experience, forgetfulness, and consensus between the two not to use condoms. Other reasons were the fact that lesbian/bisexual couples did not have protective tools available on the market and in the SUS for sexual intercourse, the lack of knowledge about the use of condoms during oral sex and using

other contraceptive methods because they believed they were sufficient to prevent pregnancy and STIs.

Table 1 -Distribution of variables for assessing the Sexual Life Behavior of university students (n=127). Bauru, SP, Brazil, 2022.

Questions about sexual behavior		N	%
Active sex life?	Yes	104	81.9%
	No	23	18.1%
Do you use condoms during sexual intercourse?	Yes	80	63%
	No	33	26%
	I don't have sexual relations	14	11%
How often do you use condoms?	Always	55	43.3%
	Sometimes/Rarely	47	38%
	Never	11	8.7%
	I don't have sexual relations	14	11%
Do you have or have you ever had any STI?	Yes	10	7.9%
	No	106	83.5%
	I don't know	11	8.7%

Table 2 shows knowledge about the forms of transmission of the Human Immunodeficiency Virus, containing

questions about sexual, blood, vertical and breastfeeding routes.

Table 2- Distribution of variables assessing knowledge about forms of HIV transmission among university students (n=127). Bauru, SP, Brazil, 2022.

Questions about HIV transmission routes		N	%
Sex without a condom	Yes	126	99.2%
	No	0	0%
	I don't know	1	0.8%
Cutlery, plates and glasses	Yes	16	12.6%
	No	107	84.3%
	I don't know	4	4.1%
Use the same bathroom	Yes	22	17.3%
	No	95	74.8%
	I don't know	10	7.9%
Kiss on the mouth	Yes	34	26.8%
	No	86	67.7%
	I don't know	7	5.5%

Pregnancy or childbirth	Yes	115	90.6%
	No	4	3.1%
	I don't know	8	6.3%
Breastfeeding	Yes	75	59.1%
	No	21	16.5%
	I don't know	31	24.4%
Insect bites	Yes	7	5.5%
	No	91	71.7%
	I don't know	29	22.8%
Syringe and/or needle	Yes	125	98.4%
	No	1	0.8%
	I don't know	1	0.8%
Playing with HIV-positive children. Justify your interpretation in other	Yes	4	3.1%
	No	109	85.8%
	I don't know	5	3.9%

The question of whether a child can catch HIV if they play with other HIV-positive children, leaving open the possibility of possible scenarios being justified, was predominantly the possibility of the child cutting themselves and thus becoming infected.

In Table 3, the multiple choice question was investigated, where participants were free to indicate more than one answer, when asked about which health services they would seek if they suspected

an STI, a low level of knowledge was observed related to spontaneous demand units, UBS (Basic Health Unit) 65 (51%), UPA (Emergency Care Unit) 25 (19.7%), CRMI (Reference Center for Infectious Diseases) 15 (11.8%), AME (Specialized Medical Care) 14 (11%), CTA (Testing and Counseling Center) 40 (31.6%), NASF (Family Health Support Center) 13 (10.2%), SAE (Specialized Care Service) 13 (10.2%), HOSPITALS 23 (18.1%), DO NOT KNOW/NO - 25 (19.8%).

Table 3- Distribution of variables assessing knowledge of HIV prevention and protection methods among university students (n=127). Bauru, SP, Brazil, 2022.

Questions about forms of prevention and protection		N	(%)
Sex with people who appear to be in good health	Yes	1	0.8%
	No	125	98.4%
	I don't know	1	0.8%
Sex with a condom	Yes	126	99.2%
	No	1	0.8%
	I don't know	0	0%
Use of contraceptives	Yes	0	0%
	No	120	94.5%

	I don't know	7	5.5%
Treatment for HIV-positive pregnant women	Yes	92	72.4%
	No	8	6.3%
	I don't know	27	21.3%
Do not share used syringes, needles or pliers	Yes	122	96.1%
	No	4	3.1%
	I don't know	1	0.8%
Unprotected sexual relations with a regular partner	Yes	18	14.2%
	No	106	83.5%
	I don't know	3	2.4%
Is AIDS a curable disease?	Yes	8	6.3%
	No	113	89%
	I don't know	6	4.7%

DISCUSSION

There was a prevalence of female participants (73.2%) and with an age range between 20 and 25 years old, this is a population vulnerable to new sexual practices in which the search for new momentary sexual experiences is emphasized and they are concerned with the here and now, leaving aside safer behaviors.

This study revealed the antagonism resulting from the use of condoms and the knowledge of young people on the subject. While most of the interviewees knew about the form of HIV transmission and the importance of using condoms, in practice, a considerable number of university students do not use condoms routinely. The main reasons for not using condoms reported in this research are in accordance with bibliographical research on the subject, highlighting the confidence of couples in long-term serious relationships, forgetting to use a condom, discomfort during use and

because they believe that sexual intercourse without a condom improves.¹²

A study conducted in São Paulo found data that converge with the results of this study. Among the justifications for this, it is worth highlighting that most participants are aware that condom use is the best way to prevent the transmission of STIs/HIV/AIDS. The data from both studies show that the factors associated with condom use are more present among single people with casual sexual partners. However, in relation to single people with steady partners or couples in serious relationships, condom use is much less common. It is possible to highlight that factors such as forgetting to use a condom contribute to unprotected sex, consequently leaving them vulnerable.^{12,13}

The fact that monogamous couples who are in a stable marital relationship tend to use condoms less during sexual relations is justified by the issue of trust and

companionship in partners, not putting them at risk. The practice of safer sex encounters certain barriers, and it is important to pay attention to the affective-sexual bond and communication; where dialogue and trust are absent, the risk of infection may be greater.¹⁴

The level of information is relative in couples who have been together for a certain amount of time, the connection over the years is inexplicable due to the development of trust and mutual complicity between the couple, the strength of trust in a relationship means that there is a consensus between both parties not to use condoms as a form of protection, as well as the fact of making the sexual act more pleasurable and sensitive for both, thus using other contraceptive methods available on the market.¹⁴

However, in relation to the largest population of the research, which are single university students, there is a peculiarity in sexual behavior where the non-use of condoms during sexual relations can have consequences, being a factor of non-use of condoms among single people who have casual sexual relations an important point to be taken into consideration, since there is knowledge about the ways of contracting the virus, but they still take risks in unsafe sexual practices. We live in a reality in

which risk behaviors should be the focus of public health policies, especially so that such policies can reach the young population that sees itself invulnerable to HIV contamination, and those who are in intimate relationships, in which, the justification for not using condoms is based on trust in the couple.

As already pointed out, most of the students in the study have knowledge about the forms of transmission and protection, however, the data show that the health/biological area has more knowledge about HIV/AIDS than the other areas, showing that there is a gap in the education of these young people in elementary/secondary education, where studies show that it is at this age that young people begin to have sexual relations, making it important to develop a school curriculum addressing sexual education in the school environment to educate young people with safer sexual behaviors.¹⁵

An important point to highlight is the lack of knowledge regarding the vertical transmission route, through breastfeeding, saliva and by using the same bathroom as someone with HIV/AIDS, since there is a considerable number of participants who do not know or still have doubts about this subject. Reinforcing the importance of sexual education primarily in the school

environment, which is the ideal place since the individual is constantly evolving.

CONCLUSION

Knowledge about the forms of transmission and protection is present in the population studied, with specific doubts about the forms of transmission. In relation to practical action, it is clear that the young population, despite understanding the forms of protection against STI/HIV/AIDS, does not practice them.

It is necessary to find new methodologies, both for public policies and for sexual education that actually reach this population, as well as opening space for new research on the topic that is of great importance to public health.

It is worth highlighting that, following an educational proposal, all participants who agreed to receive more information on the subject were sent an information booklet on HIV/AIDS at the end of the research.

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