

Risky sexual behavior in adolescents does not depend on the level of knowledge about HIV/AIDS?

O comportamento sexual de risco em adolescentes independe do nível de conhecimento sobre HIV/AIDS?

¿Es el comportamiento sexual de riesgo en los adolescentes independiente del nivel de conocimiento sobre el VIH/SIDA?

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Abstract

Objective: to assess the knowledge and practices of adolescent students in relation to HIV/AIDS and other STIs. **Methods:** this is a cross-sectional study, with a quantitative approach, which included twelve public schools from seven cities in Rio Grande do Norte, with a sample of 623 individuals. Two electronic and interactive questionnaires were used for data collection. Data processing was performed using SPSS 25.0® and Stata 14.0. For the analysis of associated factors, the Item Response Theory was used. The project of this study was approved by the Research Ethics Committee of the Federal University of Rio Grande do Norte, Protocol No. 99473118.2.0000.5292. **Results:** The participants who achieved the highest means of knowledge level were female (6.04 ± 4.47), with a partner (6.13 ± 4.49), white (6.10 ± 4.46) and received financial assistance from the government (6.72 ± 4.40). Most teenagers reported that they had already had their first sexual intercourse. Of those who continued to have sex in the last 6 months, only 31.3% used a condom. **Final considerations:** Adolescents have a considerable level of knowledge about the prevention of HIV/AIDS and other STIs, but their sexual practices do not follow the recommended preventive measures.

Keywords: Adolescent; Sexually transmitted diseases; Acquired immunodeficiency syndrome; Health education.

Resumo

Objetivo: avaliar os saberes e práticas dos adolescentes escolares em relação ao HIV/AIDS e outras IST. **Métodos:** trata-se de um estudo transversal, com abordagem quantitativa, que incluiu doze escolas públicas de sete cidades do Rio Grande do Norte, com uma amostragem de 623 indivíduos. Foram utilizados dois questionários eletrônicos e interativos para coleta de dados. O tratamento dos dados foi realizado no SPSS 25.0® e pelo Stata 14.0. Para a análise dos fatores associados, foi utilizada a Teoria da Resposta ao Item. O projeto deste estudo foi aprovado pelo Comitê de Ética em Pesquisa da Universidade Federal do Rio Grande do Norte, Protocolo nº 99473118.2.0000.5292. **Resultados:** Os participantes que alcançaram as maiores médias de nível de conhecimento eram do sexo feminino ($6,04 \pm 4,47$),

com companheiro ($6,13 \pm 4,49$), brancos ($6,10 \pm 4,46$) e recebiam auxílio financeiro do governo ($6,72 \pm 4,40$). A maioria dos adolescentes relataram que já haviam tido sua primeira relação sexual. Daqueles que mantiveram a prática sexual nos últimos 6 meses, apenas 31,3% usaram preservativo. Considerações finais: Os adolescentes apresentam um nível de conhecimento considerável sobre a prevenção do HIV/AIDS e outras IST, mas suas práticas sexuais não seguem as medidas preventivas recomendadas.

Palavras-chave: Adolescente; Doenças sexualmente transmissíveis; Síndrome da imunodeficiência adquirida; Educação em saúde.

Resumen

Objetivo: evaluar los conocimientos y prácticas de los estudiantes adolescentes en relación con el VIH/SIDA y otras ITS. Métodos: se trata de un estudio transversal, con enfoque cuantitativo, que incluyó a doce escuelas públicas de siete ciudades de Rio Grande do Norte, con una muestra de 623 individuos. Se utilizaron dos cuestionarios electrónicos e interactivos para la recopilación de datos. El tratamiento de los datos se realizó con SPSS 25.0® y Stata 14.0. Para el análisis de factores asociados se utilizó la Teoría de Respuesta al Ítem. El proyecto de este estudio fue aprobado por el Comité de Ética en Investigación de la Universidad Federal de Rio Grande do Norte, Protocolo No. 99473118.2.0000.5292. Resultados: Los participantes que alcanzaron el mayor nivel medio de conocimiento fueron mujeres ($6,04 \pm 4,47$), con pareja ($6,13 \pm 4,49$), blancos ($6,10 \pm 4,46$) y recibieron ayuda económica del gobierno ($6,72 \pm 4,40$). La mayoría de los adolescentes informaron que ya habían tenido su primera relación sexual. De los que continuaron teniendo relaciones sexuales en los últimos 6 meses, solo el 31,3% usó condón. Consideraciones finales: Los adolescentes tienen un nivel considerable de conocimiento sobre la prevención del VIH/SIDA y otras ITS, pero sus prácticas sexuales no siguen las medidas preventivas recomendadas.

Palabras clave: Adolescente; Enfermedades sexualmente transmisibles; Síndrome de inmunodeficiencia adquirida; Educación para la salud.

1. Introduction

Adolescence is a period of life marked by intense physical, psychological, social and cognitive changes (Neves et al., 2017). It is at this stage where basic patterns of behavior are established that will have repercussions throughout life, such as the beginning of sexual activities (Fonseca et al., 2018).

The National School Health Survey (PeNSE, in Portuguese) (2016) conducted in Brazil, considers that over the years, teenagers have been starting sexual activities earlier, with an average age between 14 and 15. In addition, most of these young people present other risk factors for the development of unhealthy sexual behaviors, such as: situations of social vulnerability, lack of knowledge about sexuality and low access to health services (Costa et al., 2020).

The process of sexual education permeates several environments, such as family, social and school (Cabrera-García et al., 2018). In view of this scenario, the importance of sexual education in the school environment is emphasized, because this knowledge will enable the development of ethical values, making young people able to make healthy choices for themselves and their partners (Zompero et al., 2018).

In addition, strengthening family ties, such as: (i) having at least one meal with parents or guardians most of the week and (ii) the knowledge of parents or guardians about what teenagers do in their spare time, is also considered a protective factor for healthy sex life among young people and teenagers (Malta et al., 2014).

The ignorance of the risks in the face of Sexually Transmitted Infections (STIs) reflects important gaps in the sexual life of individuals, such as non-adhering to prevention methods, such as condom use, and is therefore considered a public health problem (Ferrari, Peres & Nascimento, 2018; Pinto et al., 2018).

These repercussions represent a great impact on the sexual and reproductive health of teenagers, since it can trigger other diseases, such as pelvic inflammatory disease, cervical cancer, female sterility, postpartum infections, among others (Costenaro et al., 2020).

Regarding socioeconomic status, individuals with better financial status have greater access to knowledge about forms of transmission and prevention of HIV infection (Brazil, 2011). Although national studies seek to trace the profile of the knowledge, attitudes and practices of teenagers about STIs, there is a scarcity of data on areas with low or medium Human

Development Index (HDI) and high social inequality (Brazil, 2010).

Thus, it is understood the importance of analyzing the risk factors for the health of teenagers, considering their social dynamics, especially in a country marked by high rates of social inequalities. This information is indispensable for the improvement of policies for the prevention and promotion of sexual health. Thus, the aim of this article was to evaluate the knowledge and practices of school teenagers in relation to HIV/AIDS and other STIs in the interior of Northeastern Brazil.

2. Methodology

This was a cross-sectional, observational and quantitative study of the CAP survey (Knowledge, Attitude and Practice). The research took place in 12 public high schools, located in the urban area of 7 cities in the interior of the State of Rio Grande do Norte. Students between 14 and 19 years old who were enrolled in regular high school were included. The exclusion criterion considered students who were transferred to another educational institution during data collection.

The sample was calculated considering the prevalence of adequate knowledge of 31.4%, an absolute margin of error of 5%, the design effect of 1.5 (as a function of cluster sample use in 1 stage) and a friction rate of 20%, suggesting a sample N of 623 (Cordeiro et al., 2017).

Within the conglomerates, schools were considered as Primary Sampling Units. Once the sample size was defined, a draw was made using the Proportional Probability to Size (PPT) technique, with reference to the number of students enrolled. Then, the sample was selected by systematic random sampling, based on lists provided by school administrations. Thus, a combination of probabilistic sampling techniques was performed hierarchically (Etikan & Bala, 2017).

Two questionnaires were applied in electronic format. The first had questions related to socioeconomic data, such as: gender, age, race, income, education, marital status, number of children, parents' schooling, responsible for family support and religion. Subsequently, the "Questionnaire for the evaluation of STD/AIDS prevention programs" was applied, used by the Ministry of Health and composed of 50 questions on the proposed theme.

Data collection took place during the months of April to June 2019, in the computer rooms of the selected educational institutions. The application was directed by the main author and three volunteer researchers, previously calibrated.

The two electronic questionnaires were inserted in the computers of the schools themselves, where the research subjects had access on scheduled days and times, allowing them to be answered in a self-applied and individual way, preserving the privacy of individuals.

Data were processed at the Statistical Package for the Social Sciences (SPSS) 25.0® and Stata 14.0. For the execution of the association tests, the nature of the independent variables and dependent variables were observed, expressed by the number of correct answers in the questionnaire. The categorical independent variables were submitted to the Chi-square/Fisher test. The quantitative ones, such as age and number of children, were categorized by tertile or median and were submitted to the same statistical test.

For the analysis of the associated factors, the degree of knowledge about STIs was considered as a dependent variable, calculated by correctly the ten questions related to the teenagers' knowledge about the theme (Chart 1). To establish the weight of each question, the data related to the answers were submitted to analysis by the Item Response Theory (IRT), which allows establishing the discriminatory power of a given question in a questionnaire, considering a given set of data. The coefficient of discriminatory power found with significant value for each question was then used as weight and a weighted score was calculated for the degree of knowledge (Moita, 2004). The independent variables were constituted by the socio-economic/demographic data of the teenagers.

Board 1 - Characterization of dependent variables related to QSAP knowledge according to code, nature and values.

Code	Nature	Issues (Variables)	Values
AIDSCAM	Nominal categorical	Q4- Do you think a person can get aids if they have sex without a condom?	0 – NO 1-YES
AIDSCUTLERY	Nominal categorical	Q5-Do you think a person can catch AIDS if they use the same cutlery, plates and glasses as someone who has AIDS?	0 -YES 1-NO
AIDSKISS	Nominal categorical	Q6-Do you think a person can get AIDS if they use the same bathroom that someone who has AIDS uses?	0-YES 1-NO
AIDSRESTROOM	Nominal categorical	Q7-Do you think a person can catch aids if they kiss on the mouth a person who has the AIDS virus?	0-YES 1-NO
AIDSPREGNANCY	Nominal categorical	Q8-During pregnancy or childbirth, the mother can pass the AIDS virus to the child?	0 – NO 1-YES
AIDSMILK	Nominal categorical	Q9-A baby can get AIDS when receiving breast milk from a woman who has the AIDS virus?	0 – NO 1-YES
AIDSINSECT	Nominal categorical	Q10-A person can catch AIDS by bites of mosquito insects?	0-YES 1- NO
AIDSBLOOD	Nominal categorical	Q11-A person can get AIDS if they receive blood contaminated by the AIDS virus?	0 – NO 1-YES
AIDSSYRINGE	Nominal categorical	Q12-A person can become infected with the AIDS virus if they use the same syringe and needle that someone else used?	0 – NO 1-YES

Source: Search data (2020).

In this sense, the project response theory (PRT) has a strong knowledge of the underlying structure to make assumptions at the item level (Andrade et al., 2000). PRT is considered a modern psychometric theory because it focuses on each item of the measuring tool and assumes that the performance of a given test can be explained by an individual, and not by directly observable characteristics, called latent characteristics. Its growth adds complex theoretical baggage to behavioral and social sciences measures, which must be researched and applied to improve the resulting tests, for example, to quantify knowledge about sexually transmitted diseases (Rodrigues et al., 2013).

Because it is a research involving human beings, the recommendations of Resolution 466/2012 of the National Health Council were followed. All interviewees signed the Free and Informed Consent Form and/or Free and Informed Consent Form, when it applied. The project of this study was evaluated by the Research Ethics Committee of the Federal University of Rio Grande do Norte - HUOL/UFRN, Protocol N 99473118.2.0000.5292.

3. Results and Discussion

The study included 623 school teenagers, with predominance of females (54.7%), average age of 16.4 ±1.13 years old, without a partner (94.4%) and non-whites (56.9). Table 1 shows the relationship between the score of correct answers regarding HIV/AIDS knowledge and sociodemographic data, using the value weighted by the Item Response Theory (ITT) technique via logistic model for two-parameter STIs (Table 1). Thus, the average, the standard deviation (D.P.) and the median refer to the variable: degree of knowledge. As for gender, there was little difference in the average number of correct answers, with a higher percentage of females (6.04 ±4.47). The highest average scans were also obtained in those with a partner (6.13±4.49), attending the 2nd year (6.01±4.47) and white (6.10±4.46). Those who lived alone (9.99±0.19) and had children (6.71±5.16) also had higher averages of hit (Table 1).

The mother also had a higher average of correct answers, those whose parents are not married (5.84±4.52), those who had at least the complete elementary level (6.34±4.41) and the father in higher education (7.35±4.00). Individuals who worked

during the studies (6.66±4,31), who had their brother as the main responsible for family support (7.36±5,10) and who received financial assistance from the federal government (6.72±4.40) also had a higher average of correct answers (Table 1).

Table 1 – Measures of central tendency and dispersion of adolescents’ knowledge and practices about HIV/AIDS in relation to the sociodemographic/economic data of the participants, Natal/RN, 2020.

Variable	N	%	Média	SD	Mediana	IC95%	
						L.I.	L.S.
Gender							
Male	282	45.3 (39.5-51.1)	5.78	4.56	9.12	5.24	6.32
Female	341	54.7 (49.4-60.0)	6.04	4.47	9.12	5.56	6.52
Marital status							
With mate	35	5.6 (0.0-13.2)	6.13	4.49	9.26	4.45	7.81
No mate	588	94.4 (92.5-96.3)	5.97	3.23	9.12	2.88	9.05
Schooling							
1 st year of high school	256	41.1 (35.1-47.1)	5.89	4.56	9.12	5.33	6.46
2 nd year of high school	206	33,1 (26.7-39.5)	6.01	4.47	9.12	5.39	6.63
3 rd year of high school	161	25.8 (19.0-32.6)	5.87	4.52	9.12	5.17	6.58
Color/Race							
Not White	355	56.9 (0.0-13.2)	5.25	4.66	6.64	3.70	3.81
White	268	43.0 (37.1-48.9)	6.10	4.46	9.12	5.56	6.64
Religion							
Adept	541	86.8 (83.9-89.7)	5.75	4.55	7.66	4.48	7.01
Not adept	82	13.2 (5.9-20.5)	5.65	4.50	8.85	4.65	6.65
Attendance to religious Ceremonies							
Attends	451	72.4 (68.3-76.5)	5.95	4.53	9.12	5.26	6.64
Does not attend	172	27.6 (20.9-34.3)	5.91	4.53	9.10	5.15	6.67
Who lives with you?							
Husband/wife, mate	24	3.9 (0.0-11.6)	5.34	4.67	5.46	3.15	7.52
I live alone	2	0.3 (0.0-7.9)	9.99	0.19	9.99	8.28	11.69
Other relatives, friends	63	10.1 (2.7-17.5)	6.32	4.43	8.95	4.43	8.20
Father and/or mother	534	85.7 (82.6-88.6)	5.91	4.52	9.12	5.53	6.29
Do you have any children? How many?							
Four or more	3	0.5 (0.0-8.5)	6.71	5.16	9.24	0.00	19.53
One to three	61	9.8 (2.3-17.1)	5.82	4.66	9.01	3.52	8.13
I don't have any children	559	89.7 (87.2-92.2)	5.93	4.51	9.12	5.55	6.31
Marital status of parents							
Married	355	57.0 (51.8-62.2)	5.82	4.53	7.03	4.41	7.23
Not married	268	43.0 (37.1-48.9)	5.84	4.52	9.12	5.37	6.32
Even when your mother Studied?							
You haven't studied	13	2.1 (0.0-9.9)	4.23	4.52	1.20	1.50	6.95
From 1 st to 4 th grade of Elementary education	113	18.1 (11.0-25.2)	5.74	4.52	8.85	4.88	6.59
Complete elementary school	216	34.7 (28.3-40.9)	6.34	4.41	9.21	5.44	7.23
Complete high school	193	31.0 (24.5-37.5)	6.10	4.54	9.18	5.00	7.20
Complete higher education	27	4.3 (0.0-12.0)	6.25	4.64	9.09	3.41	9.09
I don't know	61	9.8 (2.3-17.3)	5.00	4.54	1.42	3.84	6.16
Even when your father studied?							
Haven't studied	44	7.1 (0.0-14.7)	5.71	4.59	8.99	4.32	7.11
From 1 st to 4 th grade of Elementary school	144	23.1 (16.2-30.0)	5.88	4.51	9.12	5.13	6.63
Complete elementary school	185	29.7 (23.8-35.4)	6.21	4.43	9.09	5.23	7.20
Complete high school	110	17.7 (10.6-24.8)	6.37	4.55	9.31	4.83	7.91
Complete higher education	18	2.9 (0.0-10.4)	7.35	4.00	9.48	4.28	10.43
I don't know	44	7.1 (0.0-14.7)	5.11	4.60	1.81	4.28	5.94
What your home is like?							
Not own	155	24.9 (18.0-31.6)	6.20	4.24	6.95	2.90	9.49
Own	468	75.1 (71.2-79.0)	6.04	4.51	9.12	5.63	6.45
Have you worked or had any activity during your studies?							
No	486	78.0 (74.3-81.7)	5.95	4.53	9.12	5.55	6.36
Yes, 1 to 3 years	23	3.7 (0.0-11.4)	4.50	4.69	4.85	0.00	9.49

Yes, more than 3 years	5	0.8 (0.0-8.6)	5.24	5.32	5.29	0.00	13.72
Yes, less than 1 year	59	9.5 (2.0-17.0)	5.37	4.53	8.79	4.18	6.56
Yes, all the time	50	8.0 (0.5-15.5)	6.66	4.31	9.39	5.38	7.94
Who is the main responsible for the support of the family?							
Husband/wife	13	2.1 (0.0-9.9)	5.48	4.68	9.12	2.65	8.30
Father or mother	543	87.2 (84.3-89.9)	5.86	4.52	9.04	5.31	6.41
Brethren	4	0.6 (0.0-8.2)	7.36	5.10	9.73	0.00	15.47
Other	63	10.1 (1.3-16.3)	6.19	4.46	9.05	4.98	7.41
What is your family's average monthly income today?							
Has no income - lives on the help of others	12	1.9 (0.0-9.6)	5.18	4.88	5.22	2.08	8.28
Receives help from Social Programs of the Federal Government	48	7.7 (0.2-15.2)	6.72	4.40	9.36	5.42	8.03
Up to R\$ 510,00	78	12.5 (5.2-19.8)	5.22	4.53	5.52	4.20	6.24
From R\$ 510.00 to R\$ 1,530.00	386	62.0 (57.1-66.7)	5.92	4.50	9.07	5.09	6.74
Over R\$ 1,530.00	99	15.9 (8.7-23.1)	5.88	4.60	9.12	4.96	6.81

SD - Standard Deviation

CI - Confidence Interval

Source: Search data (2020).

Table 2 shows variables in the family context and participation in educational activities related to STIs. Most teenagers did not have smokers (61%) and alcoholics (52.2%) in their family. The Internet is cited as the main means of acquiring knowledge regarding STIs (83.8%). A significant portion of the interviewees reported having already participated in some educational action on sexual and reproductive health at school (65.7%), with the majority of these actions conducted by teachers (27.1%). A larger number also reported having received pamphlets on STIs prevention in the last year (51.5%), however, most of the sample (64.8%) reported not having received condoms.

Table 2 – Distribution of absolute values and percentages of family context variables and participation in educational activities in relation to HIV/AIDS and other STIs, Natal/RN, 2020.

Variable	Category	N	% (CI95%)
Someone smokes in your family?	Yes	243	39.0 (32.9-45.1)
	No	380	61.0 (56.1-65.9)
Do you have any family members involved with alcoholism?	Yes	298	47.8 (42.1-53.5)
	No	325	52.2 (46.8-57.6)
Which means of communication do you use most to gain knowledge about HIV/AIDS and other STIs?	Internet	522	83.8 (80.6-87.0)
	Newspaper	28	4.5 (0.0-12.2)
	Magazine	6	1.0 (0.0-9.0)
	Television, Radio	67	10.8 (3.4-18.2)
Have you participated in any educational action on sexual and reproductive health in your school?	No	214	34.3 (27.9-40.7)
	Yes	409	65.7 (61.1-70.3)
Who conducted the actions? (Only mark this alternative if the answer to question 19 was "YES")	PSE	94	15.1 (7.9-22.3)
	Teachers	169	27.1 (20.4-33.8)
	University Projects	20	3.2 (0.0-10.9)
	Other social programs	125	20.1 (13.1-27.1)
You have received informative pamphlets about HIV/AIDS and other STIs in the last year?	No	302	48.5 (42.9-54.1)
	Yes	321	51.5 (46.0-57.0)
You've had condoms in the last year?	No	404	64.8 (60.1-69.5)
	Yes	219	35.2 (28.9-41.5)
Have you participated in any talk, talk wheel or information workshop on HIV/AIDS and other STIs in the last year?	No	284	45.6 (39.8-51.4)
	Yes	339	54.4 (49.1-59.7)

CI - Confidence Interval
Source: Search data (2020).

Regarding knowledge related to sexually transmitted forms of infection, 95.3% of the interviewees reported that a person can contract AIDS by having sex without a condom; 83.6% believe that the mother can transmit the AIDS virus during pregnancy or childbirth to the baby; 61.8% stated that a baby can catch AIDS when receiving contaminated breast milk; 96.1% answered that contaminated blood transfusion is also a means to acquire AIDS, as well as the sharing of contaminated syringes (95.8%); 87% of teenagers agree that a child does not contract AIDS simply by playing with another child with the virus (Table 3).

Table 3 - Distribution of absolute values and percentages of variables related to QASP questionnaire knowledge, Natal, 2020.

Variable	Category	N	% (IC95%)
Do you think a person can get aids if they have sex without a condom?	NO	29	4.7 (0.0-12.4)
	YES	594	95.3 (93.6-97.0)
Do you think a person can catch AIDS if they use the same cutlery. plates and glasses as someone who has AIDS?	YES	262	42.1 (36.1-48.1)
	NO	361	57.9 (52.8-63.0)
Do you think a person can catch aids if they kiss on the mouth a person who has the AIDS virus?	YES	319	51.2 (45.7-56.7)
	NO	304	48.8 (43.2-54.4)
Do you think a person can get AIDS if they use the same bathroom that someone who has AIDS uses?	YES	234	37.6 (31.4-43.8)
	NO	389	62.4 (57.6-67.2)
During pregnancy or childbirth. the mother can pass the AIDS virus to the child?	NO	102	16.4 (9.2-23.6)
	YES	521	83.6 (80.4-86.8)
A baby can get AIDS when receiving breast milk from a woman who has the AIDS virus?	NO	238	38.2 (32.0-44.4)
	YES	385	61.8 (56.9-66.7)
A person can catch AIDS by mosquito-like insect bites?	YES	207	33.2 (26.8-39.6)
	NO	416	66.8 (62.3-71.3)
A person can get AIDS if they receive blood contaminated by the AIDS virus?	NO	24	3.9 (0.0-11.6)
	YES	599	96.1 (94.5-97.7)
A person can become infected with the AIDS virus if they use the same syringe and needle that someone else used?	NO	26	4.2 (0.0-11.9)
	YES	597	95.8 (94.2-97.4)
A child can get AIDS if they play with another child who has the virus?	YES	81	13.0 (5.7-20.3)
	NO	542	87.0 (84.2-89.8)

CI - Confidence Interval
Source: Search data (2020).

Regarding sexual practices, 50.7% of teenagers reported having already had their first sexual intercourse. The age of initiation to sexual practice ranged from 9 to 18 years, with predominance of those in the age group between 14 and 17 (78.9%). Regarding condom use in the first relationship, the majority reported having used (61.1%), however, of those who keep sexuality active in the last six months, only 31.3% used condoms. Most reported not having sex with more than six people in the last six months (70.9%) and 62.7% reported having sex with a steady partner. Most of them also answered that they had not paid to have sex with someone (70.9%) (Table 4).

Table 4 - Distribution of absolute values and percentages of adolescents who started sexual practice in relation to contextual questions of the questionnaire QASP (N=316). Natal. 2020.

Variable	Category	N	% (CI95%)
Have you ever had sex?	YES	316	50.7 (45.2-56.2)
	NO	307	49.3 (43.7-54.9)
How old were you when you first had sex?	9 to 13	43	13.6 (3.4-23.8)
	14 to 17	249	78.9 (73.8-84.0)
	18	2	0.6 (0.0-11.3)
	DIDN'T ANSWER	22	7.0 (0.0-17.7)
You used a condom when you first had sex?	YES	193	61.1 (54.2-68.0)
	NO	118	37.3 (28.6-46.0)
	DIDN'T ANSWER	5	1.6 (0.0-12.6)
You've had sex in the last six months?	YES	243	76.9 (71.6-82.2)
	NO	68	21.5 (11.7-31.3)
	DIDN'T ANSWER	5	1.6 (0.0-12.6)
You've had a condom every time in the last six months?	YES	99	31.3 (22.2-40.4)
	NO	144	45.6 (37.5-53.7)
	DIDN'T ANSWER	73	23.1 (13.4-32.8)
Have you had sex with more than six people in the last six months?	SIM	19	6.0 (0.0-16.7)
	NO	224	70.9 (65.0-76.8)
	DIDN'T ANSWER	73	23.1 (13.4-32.8)
Have you had sex with someone you consider a steady partner or steady partner. i.e.. husband. wife. companion. companion. groom. bride. boyfriend. girlfriend or lover?	YES	198	62.7 (56.0-69.4)
	NO	45	14.2 (4.0-24.4)
	DIDN'T ANSWER	73	23.1 (13.4-32.8)
Your last fuck with this person was using a condom?	YES	91	28.8 (16.5-38.1)
	NO	106	33.5 (24.5-42.5)
	DIDN'T ANSWER	119	37.7 (29.0-46.4)
You've had sex with someone you consider an eventual partner or scheme. i.e. someone you've been with?	YES	139	44.0 (35.7-52.3)
	NO	102	32.3 (23.2-41.4)
	DIDN'T ANSWER	75	23.7 (14.1-33.3)
Your last fuck with this person was wearing a condom.?	YES	80	25.3 (15.8-34.8)
	NO	58	18.4 (8.4-28.4)
	DIDN'T ANSWER	178	56.3 (49.0-63.6)
In the last six months. you've paid to have sex with someone?	YES	9	2.8 (0.0-13.6)
	NO	224	70.9 (65.0-76.8)
	DIDN'T ANSWER	83	26.3 (16.8-35.8)
In the last six months you've received money. drugs or gift to have sex with someone?	YES	7	2.2 (0.0-13.1)
	NO	235	74.4 (68.8-80.0)
	DIDN'T ANSWER	74	23.4 (13.8-33.0)
Your last fuck with this person was wearing a condom.?	YES	3	0.9 (0.0-11.6)
	NO	4	1.3 (0.0-12.4)
	DIDN'T ANSWER	309	97.8 (96.2-99.4)
You've had some kind of penis or vagina wound in the last six months.?	YES	11	3.5 (0.0-14.4)
	NO	225	71.2 (65.3-77.1)
	DIDN'T ANSWER	80	25.3 (15.8-34.8)
You sought the health service because of the wound in the penis or vagina?	YES	4	1.3 (0.0-12.4)
	NO	8	2.5 (0.0-13.3)
	DIDN'T ANSWER	304	96.2 (94.1-98.3)
You've had some runrun through the urine canal in the last six months	YES	31	9.8 (0.0-20.3)
	NO	190	60.1 (53.1-67.1)
	DIDN'T ANSWER	95	30.1 (20.9-39.3)
You went to the health service because of the discharge through the urine canal?	YES	15	4.7 (0.0-15.4)
	NO	21	6.6 (0.0-17.2)
	DIDN'T ANSWER	280	88.6 (84.9-92.3)
You used alcohol the last time you had sex?	YES	49	15.5 (5.4-25.6)
	NO	180	57.0 (49.8-64.2)
	DIDN'T ANSWER	87	27.5 (18.1-36.9)
You used some drugs the last time you had sex? Marijuana or cocaine or crack or other drug?	YES	21	6.6 (0.0-17.2)
	NO	218	69.0 (62.9-75.1)
	DIDN'T ANSWER	77	24.4 (14.8-34.0)

CI - Confidence Interval.
Source: Search data (2020).

4. Discussion

The present study aimed to evaluate the knowledge, attitudes and practices of school teenagers about their sexuality. Its results become essential in planning and decision-making regarding the sexual education provided to this public. Although positive results were found regarding the interviewees' knowledge about the prevention of HIV/AIDS and other STIs, conflicting statistics were identified regarding the practices adopted by them.

Female participants obtained a higher average of success regarding knowledge and practices tangent to HIV, which agrees with the existing literature where it is observed that men are more vulnerable about the risks regarding STIs in relation to women, since they have their first relationship earlier (Scoralick et al., 2018). Still aware of the fact that, in a casual way, girls discuss sexuality with friends and new acquaintances and choose a stable partner or boyfriend to perform the first sexual intercourse (Oliveira et al., 2018). Boys also have more sexual partners than girls (Costa, Silva & Nascimento, 2018).

They also obtained higher averages of success those with a partner, attending the 2nd year, white and receiving financial aid from the federal government. Hartmann and Cesar (2013) suggest that belonging to the female gender, having a lower age, low schooling and lower family income, being single and without a girlfriend are factors associated in isolation with the non-knowledge of a male condom.

Young people with lower schooling reported the onset of earlier sexual activity, while students with higher schooling showed greater concern about becoming infected with some STIs and also a higher level of knowledge related to the subject, using condoms more frequently, both in the first and most recent sexual intercourse (Miranda et al., 2013).

Observing the questions about knowledge and practices in isolation, most of the interviewees correctly mentioned the possibility of HIV transmission during condom sex, during pregnancy, childbirth or breastfeeding, by blood transfusion as well as the sharing of contaminated syringes; and agree that a child does not catch AIDS while playing with another child carrying the virus.

The findings of this study corroborate with Silva et al. (2016), where it was demonstrated that when asked if HIV infection is possible through the shared use of needles and syringes, regarding the vertical transmission of HIV and the transmission of HIV through breast milk, most stated that they knew about the possibility of transmission.

Regarding the educational activities related to the theme HIV/AIDS and other STIs, most of the students reported having participated in some educational action, developed in the school itself, by teachers or other social programs, and a significant portion of the interviewees received informative materials in relation to STIs. The findings compare a previous study, which showed that most teenagers did not obtain guidance on HIV/AIDS at school (Silva et al., 2016), which makes them susceptible to receiving wrong or incomplete information with friends or partners who also do not have sufficient knowledge (Santos & Nogueira, 2019).

Angelim et al. (2016) point to the importance of conducting information workshops during the learning process of students, promoting moments of discussion and reflection on the attitudes of students towards risk factors, symptoms, prevention and forms of transmission of HIV/AIDS and other STIs, in addition, the need to stimulate the support of safe sexual behaviors.

Most of the participants in this study stated that, although they received information about STIs, condoms were not given condoms, which is an important point to note because a significant portion of teenagers suggests that the realization of educational campaigns on HIV/AIDS and other STIs, and the delivery of condoms by municipal health centers, would be a positive practice in the prevention of these infections. Since the lectures considerably expanded the interviewees' knowledge about the theme in question (Costa & Nunes, 2017).

At this juncture, it is necessary to provide a closer approximation of the school with health services, making them feel comfortable seeking help and seeking information (Ciriaco et al., 2019). Thus, these subjects may expand their autonomy for

conscious choices. Sex education is a shared responsibility among educators, health professionals, in addition to parents who can have these dialogues when they feel comfortable and able to talk to their children about the subject (Queiroz et al., 2016).

About sexual practices, most teenagers reported having already had their first sexual intercourse. The age of initiation to sexual practice ranged from 9 to 18 years old, with predominance of those in the age group between 14 and 17. The findings corroborate the literature, which indicates that the average age at the beginning of sexual life corresponded to 14, ranging from 12 to 17 for girls and 7 to 16 for boys. And that most students had their first sexual intercourse in the interval between 13 and 15, and condom use was reported by only 39% of them (Souza, 2018).

Regarding condom use in the first relationship, the majority reported having used, however, those who maintain active sexuality in the last six months, most reported not using condoms. This fact agrees with the literature, where it is verified that most sexually active young people used the insum in the first sexual intercourse (Moreira, Dumith & Paludo, 2018).

Regarding risky sexual behavior, the higher proportion prefers to maintain sexual practice with fixed partners and use condoms as a means of preventing STIs. However, a significant portion prevails that does not use condoms in sexual activities, which may be linked to the result that states that most respondents prefer a monogamous relationship, because the relationship of trust and proximity between partners can contrast with the use of condoms about safe sex (Flores, 2016).

Condom use permeates social construction, to which men are conditioned to reject the idea of condoms as a form of sexual reaffirmation. Thus, they may react negatively or violently when they are pressured to use (Martins et al., 2020). Therefore, there remains the need to understand why we do not agree, because through these answers, guidance strategies can be created on the benefit of condom use, with a view to consolidating the theme for all people, especially those teenagers who least ingress (Souza, 2018).

It is essential that health professionals with education formulate strategies to disseminate to teenagers, knowledge about HIV/AIDS and other STIs, so that they can understand safe behaviors in their sexual relations. Promptly, the construction of educational practices in schools will give teenagers the opportunity to question, engage and participate, working on their own doubts, learning about the subject and thus preventing themselves against these infections (Souza, 2018).

5. Conclusion

It can be concluded that the present study obtained positive results regarding the evaluation of teenagers' knowledge about the prevention of HIV/AIDS and other STIs, since most of the interviewees know the forms of transmission of these infections. However, although young people have acquired a satisfactory degree of knowledge, they insist on adopting unsafe sexual practices, especially about condom use, which decreases over the occurrence of sexual intercourse.

However, there is a whole cultural and socioeconomic context that acts as a modulator of practices, behaviors and attitudes, and interferes in the decision-making process. In this context, it is considered that this study provides relevant information for those who are involved in interventions to promote sexual and reproductive health, since it sought to evaluate the knowledge, attitudes and practices of students, and, through this analysis, reinforce the need to invest in policies and programs of sexual orientation in schools with attention focused on the integral health of teenagers, in order to prevent them from becoming involved in situations of exposure to the risks of HIV/AIDS and other STIs, considering aspects such as poverty, different cultures, social exclusion and other associated factors.

We cite as strategies to change the current scenario, the offer of continuous educational actions, coming from primary care in partnership with schools. The multidisciplinary health team, especially the nursing professional, has knowledge about the theme. In this sense, the implementation of activities aimed at promoting sexual and reproductive health, and the prevention of STIs, can contribute significantly to the adoption of safe and healthy practices by teenagers.

As limitations, the study was conducted only with teenagers from public schools, presenting similar levels of education, making the sample homogeneous in this aspect. In this regard, it is necessary to include more heterogeneous samples in future studies. It should be noted that because it is a knowledge and practice survey, as well as a cross-sectional study, the research presents the limitation of not accompanying these young people for a period, as well as pointing out the need for new studies that seek to highlight why teenagers, even with knowledge about safe practices, insist on countering prevention, putting their own health and that of others at risk.

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