# HEALTH AND SEXUALITY: CONCEPTIONS AND PRACTICES OF TEENAGE STUDENTS IN JUIZ DE FORA, MINAS GERAIS

# CONCEPÇÕES E PRÁTICAS SOBRE SAÚDE E SEXUALIDADE DE ESTUDANTES ADOLESCENTES EM JUIZ DE FORA, MINAS GERAIS

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#### ABSTRACT

Introduction: The adolescence is a process marked by vertiginous biopsychosocial changes, being related to the formation of personality and sexual manifestations. These factors, added to disinformation and the social context in which adolescents are inserted, expose them to a greater vulnerability to Sexually Transmitted Diseases (STD), a condition that deserves a special attention from public health policies. Objective: The objective of this study is to outline the sociocultural profile of adolescents and their relationship with STD awareness, in addition to collaborate to a healthy sexual behavior. Methods: The cross-sectional and descriptive observational study used a sample of 489 students from the 9th grade of 18 municipal public schools in the city of Juiz de Fora, Minas Gerais State, and applied a semistructured questionnaire with a posterior analysis of the collected data. Furthermore, educational lectures were promoted by using audiovisual resources and musical presentations performed by medicine students from Federal University of Juiz de Fora (Universidade Federal de Juiz de Fora – UFJF). Results: Results indicate insufficient knowledge and social responsibility among adolescents against the difficulties that the practice of sexuality imposes, besides factors that potentially contribute for the vulnerability of young people. In that context, although 26.2% of adolescents have already began their sexual life, the rate of 81.3% of condom use is unsatisfactory. Moreover, only 37.4% declared themselves to be entangled in the school environment and 61.5% reported full social acceptance, which suggests the necessity of chasing acceptance through sexual permissiveness behavior. Also, it is worth mentioning the use of licit drugs of 15.3%. Conclusion: The study shows that, despite their sexual initiation, adolescents' knowledge about STD is unsatisfactory, exposing, thus, their need to be perceived as vulnerable in the context of public health policies. Carrying out activities at school is a strategy to stim

KEYWORDS: sexually transmitted diseases; sexual education; adolescents; health promotion.

#### **RESUMO**

Introdução: A adolescência, fase de vertiginosas transformações biopsicossociais, está intrincada à formação da personalidade e às manifestações sexuais. Esses fatores, somados à desinformação e ao contexto social no qual estão inseridos, expõem os adolescentes a uma maior vulnerabilidade às doenças sexualmente transmissíveis (DST), condição que merece especial atenção das políticas públicas de saúde. Objetivo: O estudo visa traçar o perfil sociocultural dos adolescentes e sua relação com o conhecimento destes acerca das DST, além de incentivar práticas sexuais seguras. Métodos: O estudo observacional transversal e descritivo utilizou amostra de 489 estudantes do 9º ano de 18 escolas públicas municipais da cidade de Juiz de Fora, Minas Gerais, sendo realizadas aplicação de questionário semiestruturado e posterior análise dos dados obtidos. Além disso, foram efetuadas palestras educativas e apresentação musical pelos discentes do curso de Medicina da Universidade Federal de Juiz de Fora (UFJF). Resultados: Os resultados apontam para conhecimento e responsabilidade social insuficientes dos adolescentes diante dos desafios que o exercício da sexualidade impõe, além de fatores potencialmente contribuintes para a vulnerabilidade dos jovens. Nesse contexto, apesar de 26,2% já terem iniciado sua vida sexual, o índice de 81,3% deles usando preservativos é insatisfatório. Além disso, apenas 37,4% declararam-se enturmados no ambiente escolar e 61,5% relataram aceitação social completa, sugerindo a necessidade de busca de aceitação por comportamentos de permissividade sexual. Destaca-se ainda o uso de drogas ilícitas de 15,3%. Conclusão: O estudo mostra que, apesar de iniciada a vida sexual, o conhecimento dos adolescentes é insatisfatório acerca das DST, expondo, assim, a necessidade de estes serem encarados como vulneráveis no âmbito das políticas públicas de saúde, sendo a realização de atividades na escola uma estratégia estimuladora do bem-estar na vivência da sexualidade.

Palavras-chave: doenças sexualmente transmissíveis; educação sexual; adolescente; promoção da saúde.

#### INTRODUTION

Adolescence, defined by the World Health Organization (WHO) as the period of life between 10 and 19 years of age<sup>(1)</sup>, is, more than an age group, a process marked by vertiginous biopsychosocial transformations. This phase of transition between childhood and adulthood, in the view of Critical Social Psychology, is institutionalized and reified by society as a stage of emotional instability and rebellion, factors that potentiate important public health vulnerabilities.

In the aforementioned scenario, it is noticed that the personality of the adolescent is intricate to their biological maturation and to sexual manifestations. However, we must also perceive the social scope that each person at this stage assumes during the practice of their sexuality, since this knowledge is not restricted to that of the body itself as a physical element, nor to that of the sexual act itself<sup>(2)</sup>. This understanding should be extended to the meaningful use of the information they have on the prevention of sexually transmitted diseases (STDs) and contraceptive methods and condoms.

In this context, some research denounces the ignorance mentioned above. These studies indicate that most adolescents are unaware of the possibility of STD transmission through oral sex, vertical transmission and breast milk<sup>(3)</sup>. In addition, a quantitative analysis performed among low-income adolescents in Ribeirão Preto, São Paulo,

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62 HELENO et al.

revealed that many were unaware of prevalent diseases, such as syphilis (35.6%) and gonorrhea (30%)<sup>(4)</sup>. In Pelotas, Rio Grande do Sul, the general knowledge about the forms of prevention is 41.4% among females and 51.4% among males. This research shows, for example, the fact that 47.5% of 8th and 9th grade girls believe that contraceptive pill use is a method of STD prevention<sup>(5)</sup>.

The knowledge on STDs, however, does not guarantee the full use of condom methods since the first sexual intercourse. Analyzing chronologically, one can see how old this matter is. A comparative study<sup>(6)</sup> on Brazilian sexual behavior between 1998<sup>(7)</sup> and 2005<sup>(8)</sup> revealed an increase in the rate of condom use in the first intercourse between the different age groups, except in those who started sexually before 14 years of age. In these cases, the drop in use was 54.4% to 26.6% in the above mentioned period of seven years — mainly among young people who started their sexual life in a casual relationship, whose decline was from 51.9% to 17.6% —, justified by this age group due to the trust in their partners, the unpredictability of the relationship or, simply, due to not liking to use the condom<sup>(9)</sup>.

These data point to a delay in the emergence of social responsibility, which, among other factors, is related to the precocity of the sexarch, scored by the WHO between 12 and 17 years of age<sup>(1)</sup>. In this way, an anachronism between the first sexual relation and the responsibility that it demands is evident. In addition, these factors contribute to the myriad of vulnerabilities that are clearly presented in epidemiological studies. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), half the new contaminations by human immunodeficiency virus (HIV) in the world affect young people between 15 and 24 years of age and the lowest rates of condom use occur between 15 and 19 years of age<sup>(10)</sup>.

This sort of vulnerability is not only conditioned by individual risk behaviors but also by a variety of factors — social, political and economic ones. This fact expresses the multidimensional nature of this phenomenon, which is related to aspects such as knowledge gap, identity search, invulnerability sensation, poor educational system, poor quality of health services offered to this age group and the stimuli from the media. Added to these factors is the incipience in how the body functions, difficulty accessing contraceptive means, lack of perspective and hostile family environment, which are among the many considerations for such alarming data<sup>(11)</sup>.

Thus, it is evident that, when premature and uninformed, the sexual life of young people is a concern for parents, teachers and health professionals, as well as a public health issue. In this context, a good alternative is the extension of the health service to the educational environment with the intention of providing a consistent knowledge capable of providing safer and healthier sexual behavior. The importance of this action is evident when we consider that a great part of the adolescents, despite knowing the methods, do not understand their importance, according to a research conducted in 2015 with pregnant women under 19 years of age enrolled in a Family Clinic of Rio de Janeiro (12).

It should be noted, therefore, that the school should be considered a privileged place to approach the theme, since, besides the potential access to a large number of young people, it allows greater proximity to the adolescent environment<sup>(13,14)</sup>. At school level, the health demands of young people tend to be even more pronounced than in health services<sup>(15)</sup>. In addition, sex education and STD/HIV programs for school-based youth have been effective in a number of countries, including Brazil<sup>(13)</sup>.

Faced with the realities exposed, the demand for projects to promote adolescent sex education becomes unquestionable. Thus, the importance of measures such as that proposed by the *Saber Viver* project is evident.

## **OBJECTIVE**

To draw up an epidemiological profile, collecting information about young people's knowledge on STD prevention, to guide sex education strategies in the field of public health promotion in Juiz de Fora. In addition, it aims to assist local public policies by outlining the profile of young people of Juiz de Fora regarding sexual health behaviors and knowledge.

# **METHODS**

The present study was developed jointly with the university extension project *Saber Viver*, Federal University of Juiz de Fora (*Universidade Federal de Juiz de Fora* – UFJF), which promotes educational lectures in municipal schools in Juiz de Fora, Minas Gerais. The population of the city estimated by the Brazilian Institute of Geography and Statistics (IBGE), in 2017, is 563,769 inhabitants, with 62,160 (11%) between 10 and 19 years old; and it has 102 municipal schools, where 1,528 students are enrolled in Elementary School<sup>(16)</sup>.

18 municipal schools were visited and 489 students between 13 and 18 years old were approached, from March 2013 to October 2017. The target audience were students of the 9th year of elementary school, a phase that concentrates the age group of 14 to 16 years in which, for the most part, the sexual life of Brazilians begins<sup>(17)</sup>.

The 30-45 minute events utilized impactful audio-visual resources and provided students with information on major STDs, family planning and prevention methods.

Considering that the effectiveness of the action depends on the commmitment and motivation of young people<sup>(15)</sup>, a presentation of musical parodies developed by the academics accompanies each lecture, approaching the related theme in a playful and engaging way. In this sense, the effectiveness of the *Saber Viver* project is expressed in the researches by Kirby *et al.*, which shows that most effective interventions in sexual education around the world include interactive activities<sup>(13)</sup>.

At the occasion of the educational events, a structured questionnaire was applied for the collection of information, including demographic and socio-cultural characterization, psycho-affective behavior and qualitative evaluation of the lectures.

The present study was approved by the Human Research Ethics Committee of UFJF (opinion 188.819; Presentation Certificate for Ethical Appreciation (CAAE) 07929912.3.0000.5133).

## RESULTS

The partial results of the ongoing research allowed us to outline a biopsychosocial profile of adolescent students with a focus on sexual health. Data related to this profile are expressed in **Tables 1, 2** and 3.

**Table 1** presents factors whose variables influence the sexual behavior of young people, such as drug use and smoking — which are present in 42.9% of the interviewees. This prevalence is also related to school

Health and sexuality 63

interaction rates, extracurricular activities and social acceptance. In the study population, only 37.4% of the respondents report being completely entangled in their environment, corroborated by the 39.5% who declared complete social acceptance. Another relevant fact, in this sense, is that 40.2% of respondents reportedly do not practice any extracurricular activities, whether related to studies, sports, language or music.

**Table 2**, on the other hand, shows how the psychoactive behavior can influence the epidemiological data of young people affected by STD, since it presents the sexual conduct of the interviewees. In relation to the onset of the appearance of male and female reproductive traits (ejaculation and menstruation), we can observe the average age

Table 1 - Demographic characterization.

Demographic characterization	n=489	%		
Demographic characterization	n=489			
AGE	14.7	'±1.3		
Gender				
Male	217	44.4		
Female	272	55.6		
Use of drugs				
Smoking	27	5.5		
Medicine without prescription	128	26.2		
Marijuana	62	12.7		
Other illicit drugs	8	1.6		
None	279	57.1		
Declared race				
White/Caucasian	195	39.9		
Brown	187	38.2		
Black	89	18.2		
Other	12	2.5		
Not declared	6	1.2		
Physical activity				
Yes	279	57.1		
No	167	34.2		
Not declared	43	8.8		
Financial provider				
Mother	101	20.7		
Father	63	12.9		
Both	291	59.5		
Grandparents	11	2.2		
Not declared	23	4.7		
School interaction				
Entangled	183	37.4		
Some friends	227	46.4		
Outcast	17	3.5		
Not declared	62	12.7		
Extracurricular activities				
Study	114	23.3		
Sport	121	24.7		
Language	47	9.6		
Music	47	9.6		
None	197	40.3		
Not declared	20	4.1		
Social acceptance				
Always	301	61.6		
Sometimes	124	25.4		
Never	12	2.5		
Not declared	52	10.6		

of 12.1 and 11.5 years, respectively. This factor is directly related to the percentage of young people who have started sexual activity (26.2%), and the mean age at onset is 14 years.

Another relevant data regarding **Table 2** is the unsatisfactory average rate of contraceptive use, especially in men (64%), of 75%. Of these, 81.3% reported having used condoms. None of the interviewees contracted any type of STD. In addition, 4.7% have reported getting someone pregnant or getting pregnant, and of these, 16.7% have already performed abortions.

Analyzing **Table 3**, we can observe the considerable percentage (72.6%) of students who stated that they only know in a reasonable way the subjects presented, since it emphasizes the relevance of the lectures. The importance of these can also be observed in the 2.5% who claimed to know nothing about the subject under discussion. About the sources of knowledge on the subject, most (65%) stated multiplicity — a combination of information coming from family, school, colleagues and even independent searches.

This table also shows the positive evaluation received by the presentation, as can be observed in the 95.3% who evaluated the meeting with a score higher than seven — with 80.6% of scores 9 or 10.

# **DISCUSSION**

The vulnerability of adolescents to sexual experience is clearly demonstrated in national and international epidemiological studies, and it is also observed in the municipal schools of Juiz de Fora. Despite the fact that most of the students reported prior knowledge about a large part of the lectures (92.6%), there were some worrisome results regarding sexual health, which reinforces the need and importance of educational activities directed to this age group.

In the present study, of the 489 interviewees, 128 young people (26.2% of those surveyed) reported having started sexual activity. The data presented a relative discrepancy between the genders, which is in line with recent researches<sup>(17)</sup>: 15.3% of the boys versus 10.8% of the girls have already started their sexual life. For men, this can be explained by several factors, especially cultural ones, such as the requirement of proof of their virility with several partners, since this stage promotes the rise to an adult social status<sup>(18)</sup>. Of women, however, the opposite is demanded: a monogamous life and sexual abstinence before marriage<sup>(18,19)</sup>.

Although none of these reported STD contamination and condom use increased between 1998 and 2005<sup>(6-8)</sup>, there was an unsatisfactory condom use rate (81.3%), especially of condoms, mainly among males (78.7%), which is in line with the regularity observed in previous studies<sup>(20)</sup>. It is also important to point out that, according to Juarez et al., there is a discrepancy in the use of condom between private and public schools, with less use among the latter<sup>(21)</sup>.

In developing countries, such as Brazil, accelerated demographic transitions, growing backwardness in marriage age, increasing propensity for prenuptial sexual relations, and a steady decline in the age of sexual initiation are factors that contribute to the unplanned pregnancy rates<sup>(17)</sup>. In the sample studied, the mean age of sexual initiation was 14 years, which corroborates data on the Brazilian population, in which sexual life starts between 14 and 16 years old<sup>(1)</sup>. This statistic exposes these adolescents to the risk of not using condoms, once their reduced use is observed in adolescents who started sexually before age 15, according to Narring et al.<sup>(22)</sup>. Early pregnancy, in turn,

64 HELENO et al.

was reported by 4.7% of respondents, given that it is comparatively lower than that of the United Nations Population Fund (UNFPA), which indicates a rate of 6.5% of pregnancy in adolescence (15 to 19 years) among Brazilian women — the largest in South America, tied with Suriname and Peru<sup>(23)</sup>.

In the sociocultural characterization of the interviewees, some factors considered as contributing to the vulnerability of young people to sexual health were observed<sup>(18)</sup>. Only 35.4% declared themselves to be entangled in the school environment and 61.3% reported complete social acceptance, which may suggest the need to seek acceptance through risky behaviors and sexual permissiveness. In addition, low rates of extracurricular activities (38.1% do not perform any) and physical exercises (only 26.4% declared out-of-school sports practice), while the declared use of illicit drugs reached 15.3%. These absences of occupation and accompaniment greatly contribute to early, disoriented and unprotected sexual initiation.

Adolescence, therefore, requires a greater focus on the development of health promotion actions, besides the integrated attention of the school, the family and health professionals, especially in the context of STDs and early pregnancy. As it is submitted to the greater exposure to situations of risk, as it happens today, the adolescent must be seen as vulnerable in the scope of public health policies<sup>(14)</sup>.

According to the Ministry of Education, conducting activities at school with health professionals is a broad strategy for disseminating information about sex education<sup>(14)</sup>. In this sense, educational actions have attracted attention to the importance of sexual health through an innovative approach that arouses students' attention and essential interest in knowledge, with their active participation, which evaluated the lecture with excellence — 80.6% of the young viewers attributed scores 9 or 10. Thus, it is noted that the *Saber Viver* project promotes the sensitization of the young person, besides stimulating security and well-being in the experience of sexuality.

Regarding the location of the topic, the school is considered privileged, since, in addition to the potential access to a large number of young people, it allows greater proximity to the adolescent environment<sup>(13,14)</sup>. In this sense, according to a 2015 research published by Constantine et al., it is indicated that an intervention based on

integrated theories of human rights, gender equality and healthy sexual development can affect precursors of healthy sexual behavior in this age group present in the school environment<sup>(24)</sup>.

In addition to the aforementioned factors, there is an increase in the number of STDs contaminated ones recently. The recent Syphilis Data Bulletin, for example, indicates the sudden increase of this disease in Brazil, with a growth of 28% in 2017, especially in the Southeast Region<sup>(25)</sup>. This number can be reduced with the education and awareness of young people. In this way, we can highlight how learning in the school environment should be complementary to that of the family environment, in which a large number of children can be brought up by only their mothers (20.7%), parents (12.9%) or grandparents (2.2%) — another factor that may indicate vulnerability.

It is concluded, therefore, that, in view of the data obtained by the *Saber Viver* extension project, it is necessary to redirect public health

**Table 3 –** Evaluation of the event.

Freshooting of the secont	n=489		
Evaluation of the event —	n	%	
Score for the presentation			
10 or 9	394	80.6	
8 or 7	72	14.7	
6 or 5	12	2.5	
4 or 3	5	1.0	
Not declared	6	1.2	
How much did you know about the subject?			
Almost everything	98	20.0	
Some of it	355	72.6	
Nothing	12	2.5	
Not declared	24	4.9	
You learned what you already knew:			
At home	68	13.9	
At school	47	9.6	
With friends	15	3.1	
Alone	25	5.1	
Many of the above	319	65.2	
Not declared	15	3.1	

Table 2 - Psychoaffective behavior.

Psychoaffective behavior	8	%	\$	%	n= 489	
					Total	%
Have you ever liked someone?	175	35.8	243	49.7	418	85.5
Have you ever dated someone?	112	22.9	143	29.2	255	52.1
Age of first ejaculation or menstruation (years)	11.5±1.16		12.1±1.41		11.8±1.35	
Have you engaged on sexual activity yet?	75	15.3	53	10.8	128	26.2
Age you started	13.7±0.99		14.3±0.43		14±0.86	
How did you feel?						
Well	59	78.7	41	77.4	100	78.1
Bad	2	2.7	9	17.0	11	8.6
Not declared	14	18.7	4	7.5	18	14.1
Did you use any contraceptive method?	48	64.0	48	90.6	96	75.0
Have you ever used a condom?	59	78.7	45	84.9	104	81.3
Number of partners	2.97±3.01		1.59±0.92		2.28±1.94	
Have you ever been contaminated by an STD?	0	0.0	0	0.0	0	0.0
Have you ever gotten pregnant or gotten someone pregnant?	2	1.6	4	3.1	6	4.7
Have you ever had an abortion?	0	0.0	1	25.0	1	16.7

STD: sexually transmitted diseases.

Health and sexuality 65

policies with regard to STD prevention. After all, as already shown, the supply and demand for knowledge about sexuality are out of date, since the onset of sexual life occurs before schooling on the subject, being essential the activity of the project to bring health to the educational scope, expanding instruction and responsibility in student health practices.

### Conflict of interests

The authors declare no conflict of interests.

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Received on: 06.27.2018 Approved on: 08.17.2018