

Importance attributed by adolescents to sexual education: correlation with their attitudes, knowledge, and sexual behavior

Importância atribuída pelos adolescentes à educação sexual: correlação com atitudes, conhecimentos e comportamento sexual

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ABSTRACT

Introduction: Sexual education plays an important role in the prevention of risk-taking sexual behaviors. The objective of this study was to evaluate the importance attributed to sexual education by adolescents, correlating it with the assessment they make of their attitudes and with their knowledge towards sexuality. Methods: This observational study included adolescents who attended elementary or high school in the central region of Portugal. A characterization of sociodemographic and sexual data was made and the Adolescent Students' Attitudes Scale towards Sexuality (E3AS) was applied. Results: We included 394 adolescents with a mean age of 14.9 ± 1.4 years. The majority (89.3%) attributed importance to sexual education. Adolescents that gave more importance to sexual education were the ones that ranked higher the information they learned about sexuality ($r = 0.236$), had less unprotected sex due to lack of information ($r = -0.363$) or because they were under the effect of alcohol and/or drugs ($r = -0.365$) and had a superior classification in F2 ($r = 0.380$), F5 ($r = 0.402$) and in the total scale ($r = 0.531$). Discussion and conclusion: Adolescents that attributed greater importance to sexual education were the ones that ranked higher the information they possessed about sexuality. After initiating sexual activity, a greater importance attributed to sexual education seems to have a protective effect on risk-taking sexual behaviors.

Keywords: adolescent, sexuality, education, behavior, attitude.

RESUMO

Introdução: A educação sexual desempenha um papel importante na prevenção de comportamentos sexuais de risco. O objetivo deste estudo foi avaliar a importância atribuída à educação sexual por adolescentes, correlacionando-a com a avaliação que eles fazem de suas atitudes e com seus conhecimentos em relação à sexualidade. Métodos: Este estudo observacional incluiu adolescentes que cursaram o ensino fundamental ou médio na região central de Portugal. Foi feita uma caracterização dos dados sociodemográficos e sexuais e foi aplicada a Escala de Atitudes dos Adolescentes em relação à Sexualidade (E3AS). Resultados: Foram incluídos 394 adolescentes com idade média de $14,9 \pm 1,4$ anos. A maioria (89,3%)

atribuiu importância à educação sexual. Os adolescentes que deram mais importância à educação sexual foram os que obtiveram maior classificação nas informações sobre sexualidade ($r = 0,236$), tiveram sexo menos desprotegido por falta de informação ($r = -0,363$) ou porque estavam sob efeito de álcool e/ou drogas ($r = -0,365$) e tiveram uma classificação superior em F2 ($r = 0,380$), F5 ($r = 0,402$) e na escala total ($r = 0,531$). Discussão e conclusão: Os adolescentes que atribuíam maior importância à educação sexual eram os que melhor classificavam as informações que possuíam sobre a sexualidade. Após iniciar a atividade sexual, uma maior importância atribuída à educação sexual parece ter um efeito protetor sobre os comportamentos sexuais de risco.

Palavras-chave: adolescente, sexualidade, educação, comportamento, attitude.

1 INTRODUCTION

Adolescents have easy access to all sorts of information, including that regarding sexuality. However, there is no guarantee that they will choose the correct information and adjust their attitudes towards a healthy sexuality.¹

According to the Europe 2020 Strategy, proposed by the European Commission, health promotion and education in schools play a relevant role in the “(...) development of healthy, sustainable and happy citizens and societies”.² In fact, school plays a leading role on the promotion of values, attitudes, and behaviors, preparing the adolescent to critical understanding and intentional participation in the construction of more fair, inclusive, and solidary contexts.

It is known that sexual education is essential in the screening of information, contributing to the prevention of risk-taking sexual behaviors. In Portugal, the widespread implementation of sexual education lessons in basic and high school education became mandatory in 2006. The aim of these lesson is defined by the law (DL 60/2009), which includes the development of skills allowing informed and safe choices in the field of sexuality, the reduction of negative consequences of risk-taking sexual behaviors and the ability to protect against all forms of exploitation and sexual abuse.³ The quality of sexual education in schools depends on the involvement of students, teachers, parents, and the community itself. Comprehensive sexual education (CSE) is advocated as one of the most effective measures in promoting a healthy sexuality, as it equips students with knowledge, values and attitudes that assist in making informed decisions. CSE refers to “education about all matters relating to sexuality and its expression”. It covers the same topics as traditional sexual education but also includes issues, such as relationships, attitudes towards sexuality, sexual roles, gender relations, and the social pressures to be sexually active.^{4,5}

In a systematic review of the literature, with the aim of analyzing the effectiveness of sexual education interventions in terms of knowledge and attitudes of adolescents, 13 studies from different countries were analyzed. The studies included, at least, two assessments, before and after the intervention. These studies demonstrated that there was knowledge gain and, even, behavior change, after the interventions occurred, thus demonstrating their effectiveness. One of the limitations of this systematic review was the lack of Portuguese articles published in this area, compromising the understanding of the effectiveness of sexual education at a national level.⁶

In 2020, Barros et al. developed the Adolescent Students' Attitude Scale for Sexuality (E3AS), a valid and reliable instrument, with good internal consistency indexes, adapted for the study of Portuguese adolescents' attitudes towards sexuality.⁷

The objective of the present study was to evaluate the importance adolescents attributed to sexual education, correlating it with the assessment they make of their knowledge and with their attitudes towards sexuality, in particular risk-taking sexual behaviors. Moreover, we intended to evaluate how the attendance of family planning appointments or adolescent medicine appointments impact their knowledge about sexuality.

2 METHODS

An online cross-sectional design was applied. This study was reported following the Strengthening the Reporting of Observational Studies cross-sectional (STROBE) checklist.

Our participants were Portuguese adolescent students, who attended elementary and high school in two public schools in the central region of Portugal. The inclusion criteria were defined as attending the 8th, 9th, 10th, 11th, or 12th grade, and being 19 years old or younger. Participants not able to read or understand Portuguese were excluded.

Using a convenience sampling method, self-reported data were collected between April 2018 to May 2018 through emails. The survey was delivered via Google Forms®. A network IP address restriction was set to prevent someone from answering multiple times. A pilot study, with a group of 20 students, validated the content and anonymization, and gathered user feedback.

The e-questionnaire was divided into three sections. The first section covered the sociodemographic and academic characteristics of the students, including age, gender, and current level of study.

The second section analysed the importance attributed by adolescents to sexual education, the knowledge they had about sexuality and sexual behaviours. Adolescents were

asked about the timing of first sexual relationship, the use of contraceptive method, risk-taking sexual behaviour and attendance of family planning appointments or adolescent medicine consultations.

In order to assess the importance given by adolescents to sexual education, we analyzed the question "What importance do you attribute to sexual education?" and to determine the adolescents' assessment of their knowledge on sexuality, we analyzed the question "How do you rate the information you know about sexuality?"; "What defines sexuality for you?", "What would you do if your partner refused to use a condom?", "If you ever had unprotected sex, it was because...", "Have you ever had sex with a person that...", "Have you ever exchanged erotic messages, with or without photos, via mobile phone, chats, or social networks?" and "How do you rate your knowledge of contraception and its use?".

The third section covered Adolescent Students' Attitudes Scale towards Sexuality (E3AS). The instrument consisted of 34 items distributed into five factors: F1. Family planning and sex education; F2. First sexual relationship; F3. Violation of sexual rights, and who to turn to in the event of unplanned pregnancies; F4. Gender expression and identity; and F5. Unplanned pregnancy and parenting. This questionnaire is a reliable and valid measure for assessing adolescents' attitudes towards sexuality. The Cronbach's alpha coefficient of the E3AS was 0.766.⁶

The protocol of the study was formally approved by National Data Protection Commission (authorization No. 10421/2017 of 09/12/2017). All participants and their parents or guardians (if participants had less than 18 years old) were previously informed of the purposes of the study and were asked for informed written consent.

Data analysis was performed through SPSS® Statistics version 24 and a maximum error probability of 5% was considered. Descriptive statistics were used to characterize the sample, namely frequencies, measures of central tendency and variability. Before applying the statistical test on the relationship between variables, the Kolmogorov–Smirnov test was applied to assess the distribution of variables. Having found that the sample did not present a normal distribution, non-parametric techniques were used to test the relationship between the variables under study. The Mann Whitney U test was used to compare the differences between two independent groups, and the Kruskal-Wallis test was used to determine if there were statistically significant differences between three or more groups on an ordinal dependent variable. Spearman's test was used between ordinal variables.

3 RESULTS

The Adolescent Students' Attitude Scale for Sexuality (E3AS) was applied to 394 adolescents, with a mean age of 14.9 ± 1.4 years, of which 53.3% were female. The years of schooling varied between the 8th and 12th grades.

Most of adolescents (78.8%) had not started sexual activity. The age of first sexual relationship was 14.9 ± 1.3 years. After initiating the sexual activity, almost all (90.3%) used some contraceptive method, although 30.1% had already unprotected sex. Regarding risk-taking sexual behavior, 80% of adolescents denied it. More than half of the sample (60.1%) did not attend family planning appointments or adolescent medicine appointments.

Comparing the adolescents regarding the beginning of their sexual activity, the adolescents who already had sexual intercourse assigned a higher value to the information they knew about sexuality ($p = 0.003$). When applied E3AS, adolescents who did not initiate sexual activity, had a superior classification in F1 – family planning and sexual education ($p = 0.006$) and in F4 – gender expression and identity ($p = 0.010$).

When considering the use of a contraceptive method, the adolescents who did not use any type of contraception had a superior classification in F1 – family planning and sexual education ($p = 0.026$). As for risk-taking sexual behavior, adolescents that denied risk behavior had a superior classification in F2 – first sexual relationship ($p = 0.027$) and in F5 – unplanned pregnancy and parenting ($p = 0.045$).

Regarding attendance of family planning appointments or adolescent medicine appointments, the adolescents who attend these resources ranked higher the information learned about sexuality ($p = 0.006$) and, when applying E3AS, they had a superior classification in the total scale ($p = 0.038$).

Most participants (89.3%) assigned importance to sexual education. The importance attributed to sexual education and the information had about sexuality were correlated with sexual risk-taking behaviors and E3AS, as shown in Table 1. Adolescents that assigned more importance to sexual education were the ones that ranked higher the information they knew about sexuality ($r = 0,236$), had less unprotected sex due to lack of information ($r = -0,363$) or because they were under the effect of alcohol and/or drugs ($r = -0,365$). Also, they had a superior classification in F2 – first sexual relationship ($r = 0,380$), F5 – unplanned pregnancy and parenting ($r = 0,402$) and in the total scale ($r = 0,531$). The higher the rating on information learned about sexuality, the higher the rating on knowledge of contraceptive methods and its use ($r = 0,401$).

Table 1. Correlation between importance attributed to sexual education and information known about sexuality towards risk-taking sexual behaviors and Adolescent Students' Attitude Scale for Sexuality

	What importance do you assign to sexual education?	How do you rate the information you know about sexuality?
What importance do you attribute to sexual education?	1	0,236**
What defines sexuality for you?		
It is being able to recognize who we are	0,172**	0,183**
It is one of the aspects of our identity	0,147**	0,197**
It is developed throughout life, through interaction with other people and with the environment	0,167**	0,055
What would you do if your partner refused to use a condom?		
I would refuse to have sex	0,177**	0,060
I would try to explain that I was not interested	0,206**	-0,004
I would accept it because I wouldn't want to lose him/her	-0,186**	-0,120*
I would wear the condom	0,209**	0,111*
If you have ever had unprotected sex, it was because...		
You had no information	-0,363*	-0,130
You had no contraceptive method	0,117	0,132
You were ashamed to acquire a contraceptive method	-0,232	-0,114
Contraceptive methods disturb intercourse	-0,067	0,095
Contraceptive methods take out pleasure	0,085	0,116
Contraceptive methods decrease confidence in the partner/relationship	-0,288	-0,245
I was under the effect of alcohol and/or drugs	-0,365*	0,246
Have you ever had sex with a person ...		
That does drugs	0,111	0,250*
That usually has sex with multiple partners	-0,108	0,276*
Who you did not know their sexual past	0,036	0,103
With a sexually transmitted infection	-0,217	-0,194
When you were under the effect of alcohol	-0,066	0,168
When you were under the effect of other drugs	-0,115	0,120
Have you ever exchanged erotic messages, with or without photos, via mobile phone, chats, or social networks?		
To provide a "proof of love"	-0,021	-0,298*
To affirm your audacity and self-confidence, showing your body in a seductive way	0,150	0,028
At the request of your partner under emotional blackmail	-0,077	0,065
Because you were convinced by someone to do it, during an online conversation	-0,096	0,078
To get revenge by sending photos or messages from other people	-0,260	-0,038
By mistake (especially from a mobile phone)	-0,093	0,064
How do you rate your knowledge of contraception and its use?	0,221**	0,401**
F1 – Family planning and sexual education	-0,004	-0,069
F2 – First sexual relationship	0,380**	0,139**
F3 – Violation of sexual rights and who to turn in the event of an unplanned pregnancy	0,118*	-0,095
F4 – Gender expression and identity	0,078	0,097
F5 – Unplanned pregnancy and parenting	0,402**	0,082
Total	0,531**	0,228**

*The correlation is significant at the 0.05 level; **the correlation is significant at the 0.01 level.

4 DISCUSSION

Programs that improve the connection to the school are likely to delay the age of coitarche and increase the use of contraception, even when they do not directly address sexuality.⁸ In our study, all the adolescents included were attending school and most of them

had not started their sexual activity. In the group that had initiated sexual activity, almost all used some form of contraceptive method, although 30.1% of them had already unprotected sex. In these cases, it stands out how an adequate sexuality education may have an important role in understanding how to practice a healthy sexuality, promoting the use of contraception, among other healthy behaviors.⁹

More than half of the sample did not attend family planning appointments or adolescent medicine appointments. This is surprising, since the Portuguese DL 120/99 foresaw the reinforcement of access to family planning.¹⁰ Some of the purposes of family planning appointments include the promotion of a healthy sexuality, giving information and advisement on sexual and reproductive health, reduction of the incidence of sexual transmitted infections (STIs) and their consequences, prevention of unwanted pregnancies, and preparation and promotion of a responsible parenting.¹¹ Although only 39.9% of our sample attended family planning appointments or adolescent medicine appointments, those who attended expressed high levels of knowledge about sexuality. This demonstrates the important role played by health professionals in the sexual education of youngsters and adolescents.

Adolescents who did not initiate sexual activity and those who did not use any type of contraception had a superior classification in F1 of E3AS. This could mean that adolescents recognize family planning as a responsibility that must be shared by both members of the couple and consider important to have places of easy access to health professionals with whom they can clarify issues related to sexuality. Also, in their opinion, sexual education should be addressed in schools since they believe that it gives them more information and clarifies their doubts.

Moreover, adolescents who did not initiate sexual activity had a superior classification in F4 of E3AS. In other words, they think more often that clothes and the use of make-up defines someone as a man or a woman, and that each person must identify and accept himself or herself as a man or a woman, regardless of the sexual organs they were born with.

Sexuality and the expression of interest is a normal part of adolescence. Parents, schools, community agencies, media, health-care providers, and policy makers have a responsibility to promote health sexuality.¹² Unfortunately, the initiation of sexual activity in adolescence is not always accompanied by a consistent sexual education. In 2005 – 2006, a structured questionnaire was administered to a convenience sample of students from selected schools in Belgium, the Czech Republic, Estonia, and Portugal. One of the goals of the study was to determine the most important sources of information for adolescents. Concerning Portugal, 361 students aged 16 – 19 years were included. Portuguese adolescents indicated that books and

magazines were their most important source of information on puberty (36.2%), while schoolteachers were the most frequent source of information on biological aspects of reproduction (41.4%). Of all countries included in this study, Portugal was the one that had the lowest percentage of adolescents attending reproductive health classes (47.9%), as opposed to Belgium (73.3%) and Estonia (92.4%).¹³

Adolescents that denied risk-taking sexual behaviors had a superior classification in F2, citing the consumption of alcohol, having an older boyfriend or girlfriend, being afraid that he/she will be angry, being afraid of abandonment or feeling pressured by colleagues/friends as reasons for the early initiation of sexual activity. Furthermore, they had a superior classification in F5, which means that they think that if in a couple the woman becomes pregnant, they should keep the child.

Early onset of sexual activity has been considered as an important marker for sexual health due to its association with risk factors, such as substance use, weaker connection to conventional institutions (parents, school and religious organizations) and poor mental health.¹⁴ According to the Health Behavior in School Children study, that included 5.695 Portuguese students, most of them (85.5%) denied previous intercourse under the influence of alcohol.¹⁵ Another study including 2.369 Portuguese students, with a mean age of 18.5 ± 2.4 years, concluded that among adolescents who had unprotected sexual intercourse, 9% were under the effect of alcohol and 5% were under the influence of other drugs.¹⁶

Unintended pregnancy during adolescence can cause serious morbidity and the use of effective contraception is one of the pillars to avoid adolescent pregnancy.¹⁸ A Portuguese study carried out from 2008 to 2010, concluded that lower rates of adolescent pregnancy were associated with increased schooling, the perspective of building a career and not having a future focused only on maternity, and greater access to reproductive health.¹⁹ Some adolescents may have the knowledge and skills regarding contraception, but may lack the motivation to avoid pregnancy; while others, may have a belief in the future and the motivation to avoid pregnancy, however lack the knowledge, attitudes, or skills. Thus, for different groups of youths, it is important to determine the reasons behind their risk-taking sexual behaviors, adjusting the programs of sex education provided.²⁰

Adolescents that attributed more importance to sexual education were the ones that ranked higher their knowledge about sexuality and had less unprotected sex, due to lack of information or because they were under the effect of alcohol and/or drugs.

Developing a healthy sexuality depends on beliefs and values on human dignity, freedom and responsibility in the search for sense of coherence, rather than seeking instant

pleasure or power, integrating the information expressed in attitudes.⁷ Kohler et al. compared the sexual health risks of adolescents who received abstinence-only and CSE to those who received no formal sexual education. They concluded that abstinence-only programs had no significant effect in delaying the initiation of sexual activity or in reducing the risk for teen pregnancy and STIs. However, CSE programs were significantly associated with reduced risk of adolescence pregnancy, whether compared with no sexual education or with abstinence-only sexual education and were marginally associated with decreased likelihood of a teen becoming sexually active compared with no sexual education.²¹

School based CSE programs approach sexuality as an integral part of adolescent's emotional and social development and can be effective in delaying initiation of sexual activity. Ramírez-Villalobos et al. demonstrated a significant reduction in initiating sex among students who received CSE, in comparison to students who had traditional public-school sex education. In this Mexican study, to employ CSE, the teachers used questions that adolescents proposed and cases that described their sexuality problems, as well as role-play exercises. Besides, every topic discussed began with a reflection to recognize the positive and negative aspects and the discussion progressed according to the adolescents' knowledge, while teachers clarified erroneous ideas.¹⁷

This highlights the importance of a comprehensive sexual education that instructs adolescents not only on anatomy and physiology of biological sex and reproduction, but also on healthy sexual development and in establishing meaningful intra and interpersonal relationships.

The present study has some limitations that should be noted. Our findings were limited by the use of a convenience sample in which participants presented a wide range of ages. Furthermore, our research adopted a cross-sectional design, so the results cannot be generalized. Future studies would benefit from an in-depth qualitative approach.

Despite these limitations, the current study has important strengths, namely the potential contribution to the definition of strategies in the promotion of sexual education in schools.

5 CONCLUSIONS

In our study, most of adolescents attributed importance to sexual education. Adolescents that attributed greater importance to sexual education were the ones that ranked higher the information they knew about sexuality. After initiation of sexual activity, the greater importance attributed to sexual education seems to have a protective effect on risk-taking sexual behaviors.

The project “*Adolescer com Sentido*” is being developed in the center region of Portugal with the aim of involving schools and students in a planned and continuous approach to the theme of affections and sexuality education, considering the reality of each school. This is important, because schools are a privileged setting concerning the promotion of interventions on sexual and reproductive health.

REFERENCES

1. Ramiro L, Reis M, Matos MG, Diniz JA, Simões C. Educação sexual, conhecimentos, crenças, atitudes e comportamentos nos adolescentes. *Rev Port Saúde Pública*. 2011;29(1):11-21.
2. Organization WH. A European policy framework and strategy for the 21st century. Health 2020. https://www.euro.who.int/__data/assets/pdf_file/0011/199532/Health2020-Long.pdf. Published 2019.
3. Lei nº 60/2009. *Diário da República, 1ª série*. 2009;151:5097-5098.
4. Alvarez M, Pinto AM. Educação sexual: atitudes, conhecimentos, conforto e disponibilidade para ensinar de professores portugueses. *Aletheia*. 2012;maio/dez(38-39):8-24.
5. Leung H, Shek D, Leung E, Shek E. Development of Contextually-relevant Sexuality Education: Lessons from a Comprehensive Review of Adolescent Sexuality Education Across Cultures. *Int J Environ Res Public Health*. 2019;16(4):621. doi:10.3390/ijerph16040621
6. Flora M, Rodrigues R, Paiva H. Intervenções de educação sexual em adolescentes: uma revisão sistemática da literatura. *Rev Enferm Ref*. 2013;III Série(nº 10):125-134. doi:10.12707/RIII1229
7. Barros TMKBH, Ramalho SIHSM de A, Gordo CMG de O, et al. Adolescent students' attitudes towards sexuality: the construction and validation of a scale. *Rev Paul Pediatr*. 2021;39. doi:10.1590/1984-0462/2021/39/2019372
8. Kirby D. The impact of schools and school programs upon adolescent sexual behavior. *J Sex Res*. 2002;39(1):27-33. doi:10.1080/00224490209552116
9. Breuner CC, Mattson G. Sexuality Education for Children and Adolescents. *Pediatrics*. 2016;138(2):e20161348. doi:10.1542/peds.2016-1348
10. Diário da República nº.186/1999, Série I-A. 1999.
11. Instituto Português do Desporto e Juventude IP. A consulta de planeamento familiar. <https://ipdj.gov.pt/consulta-de-planeamento-familiar>.
12. Tulloch T, Kaufman M. Adolescent Sexuality. *Pediatr Rev*. 2013;34(1):29-38. doi:10.1542/pir.34-1-29
13. Fronteira I, Silva M, Unzeitig V, Karro H, Temmerman M. Sexual and reproductive health of adolescents in Belgium, the Czech. *Eur J Contracept Reprod Heal Care*. 2009;14(3):215-220. doi:10.1080/13625180902894524
14. Madkour AS, Farhat T, Halpern CT, Godeau E, Gabhainn SN. Early Adolescent Sexual Initiation as a Problem Behavior: A Comparative Study of Five Nations. *J Adolesc Heal*. 2010;47(4):389-398. doi:10.1016/j.jadohealth.2010.02.008
15. Ramiro L, Reis M, Matos M. Comportamentos Sexuais de Risco nos Adolescentes:

Resultados do Estudo HBSC 2018. *JCAP*. 2019;10(1):149-158.

16. Miranda PSF, Aquino JMG, Monteiro RMP de C, Dixe M dos ACR, Luz AMB da, Moleiro P. Sexual behaviors: study in the youth. *Einstein (São Paulo)*. 2018;16(3). doi:10.1590/s1679-45082018ao4265
17. Ramírez-Villalobos D, Monterubio-Flores EA, Gonzalez-Vazquez TT, Molina-Rodríguez JF, Ruelas-González MG, Alcalde-Rabanal JE. Delaying sexual onset: outcome of a comprehensive sexuality education initiative for adolescents in public schools. *BMC Public Health*. 2021;21(1):1439. doi:10.1186/s12889-021-11388-2
18. Ott MA, Sucato GS. Contraception for Adolescents. *Pediatrics*. 2014;134(4):e1257-e1281. doi:10.1542/peds.2014-2300
19. Schirò E, Koller S. Gravidez na Adolescência: Como se configura no Brasil e em Portugal? 2009.
20. Kirby D. Effective approaches to reducing adolescent unprotected sex, pregnancy, and childbearing. *J Sex Res*. 2002;39(1):51-57. doi:10.1080/00224490209552120
21. Kohler PK, Manhart LE, Lafferty WE. Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy. *J Adolesc Heal*. 2008;42(4):344-351. doi:10.1016/j.jadohealth.2007.08.026