SEVEN
publicações acadêmicas

BEYOND TABOOS: HOW CAN THE SCHOOL GUARANTEE SEXUAL AND REPRODUCTIVE HEALTH FOR ADOLESCENTS?

https://doi.org/10.56238/sevened2025.012-004

José Helder Diniz Junior[1], Maria Aldeisa Gadelha[2], Ricardo Hugo Gonzalez[3], Aaron Macena da Silva[4], Andréa Soares Rocha da Silva[5], Raimunda Hermelinda Maia Macena[6]

ABSTRACT

Adolescence is a stage marked by intense changes and vulnerabilities, especially in the field of sexuality. This chapter investigates how schools can promote sexual and reproductive health among adolescents through the analysis of Brazilian public policies, with a focus on the School Health Program (PSE). The methodological approach combines documentary analysis and literature review, considering educational legislation such as LDB, BNCC, and the curriculum documents of Ceará and Fortaleza. From an intersectoral and multidisciplinary approach, the research discusses the evolution of Brazilian public policies aimed at the sexual and reproductive health of young people, highlighting legal frameworks such as the LDB, the PCNs and the BNCC, in addition to the curricular references of Ceará and Fortaleza. The health indicators analyzed — early pregnancy rate, use of contraceptive methods and incidence of STIs — point to significant improvements after the implementation of structured educational programs. Evidence shows that access to qualified information, health care and teacher training has a positive impact on the sexual behavior of adolescents. However, cultural and structural barriers persist that limit the effectiveness of these policies. It is concluded that the consolidation of sex education in schools is imperative to guarantee fundamental rights and build an autonomous and healthy youth.

Keywords: Sex education. Adolescence. Public Policies.

[1] Master's degree, Federal University of Ceará
[2] Dr., Regional Council of Physical Education
[3] Dr., Federal University of Ceará
[4] Specialist, Federal University of Ceará
[5] Dr., Federal University of Ceará
[6] Post-Doctorate, Federal University of Ceará

1 INTRODUCTION

Adolescence is a crucial phase in human development, characterized by profound biological, psychological, and social transformations. During this period, young people begin to explore their sexuality, often without adequate support and guidance (Eisenstein, 2005; De Sousa, 2006; D'aurea-Tardeli, 2009; Cornellà I Canals, 2010; Moreira et al., 2011). This gap exposes them to several risk behaviors, such as early pregnancy, HIV infection, and other Sexually Transmitted Infections (STIs) (Campos et al., 2013; Costa et al., 2013). In Brazil, the promotion of sexual health and prevention of risk behaviors, including violence, among adolescents, including the prevention of STIs and HIV, continues to be a significant challenge for public health, requiring effective policies and programs to educate and protect this population group (Brasil and RepúBlica, 2007; Neves and Romero, 2017; Health and Education, 2017; Brazil, 2024).

The importance of focusing on early interventions for adolescents is justified by the fact that such actions can significantly reduce the incidence of STIs and HIV, in addition to promoting healthy behaviors that last throughout adult life, with a positive impact on public health in the long term (Diclemente et al., 2007; Brasil and SaúDe, 2024). It is in this context that the School Health Program (PSE) is inserted, an intersectoral initiative established in 2007 to promote the health of students in the public school system throughout the country (Brasil and RepúBlica, 2007; Health and Education, 2017; Brazil, 2024). Among its main objectives is practices that pose health risks, including violence,,, with a focus on the prevention of STIs, HIV and teenage pregnancy through educational actions (Paiva et al., 2006).

Despite its relevance, the PES faces significant challenges. Its effectiveness varies among regions of Brazil, reflecting socioeconomic and cultural disparities (Costa et al., 2013; Health and Education, 2017; Brazil, 2024). In Ceará, the limitations include difficulties in the training process of health and education professionals and the resistance of students and their families to preventive activities (Dias et al., 2020).

The topic of education in vulnerable behaviors, including for violence, has always been controversial in Brazil, with marked influences from the Catholic Church and, later, from the Evangelical Churches, which shaped the school curriculum (Dos Santos and Santos Adinolfi, 2021; Silva et al., 2021). The debate on how sexuality should be addressed in schools has evolved over the decades, resulting in a broader and more inclusive understanding, which takes into account the biological, sociocultural, and psychological dimensions of sexuality (Bartasevicius and De Campos Miranda, 2019; Dos Santos and Santos Adinolfi, 2021).

In view of the above, it is clear that education in promoting healthy attitudes in adolescence is an essential strategy to ensure the integral development of young people and promote public health. This study aims to analyze the impact of the implementation of public policies aimed at education for life in schools, with a special focus on the School Health Program (PSE), examining its effectiveness in preventing sexually transmitted infections (STIs), early pregnancy and risk behaviors, including violence, among adolescents, in the light of national and international guidelines.

2 METHODOLOGY

The methodology adopted in this research aims to analyze the effectiveness of public policies for sex education, with emphasis on the School Health Program (PSE), in the promotion of sexual and reproductive health of adolescents. It is a descriptive qualitative approach, based on documentary analysis and literature review. Primary sources include official documents such as the National Common Curriculum Base (BNCC), the Law of Guidelines and Bases of National Education (LDB), the National Curriculum Parameters (PCNs), the Referential Curriculum Document of Ceará (DCRC) and the Referential Curriculum Document of Fortaleza (DCRFor), as well as epidemiological data provided by the Ministry of Health and the National School-based Health Survey (PeNSE).

Secondary sources comprise scholarly articles and publications from international organizations, such as the World Health Organization (WHO), the Pan American Health Organization (PAHO), and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

The criteria for selecting studies consider thematic relevance, geographic coverage with a focus on the Brazilian Northeast, especially Ceará, timeliness of publications (preference for the last 10 years) and scientific validity (publications in peer-reviewed journals or documents from recognized organizations). Indicators analyzed include rates of early pregnancy, contraceptive use, and incidence of sexually transmitted infections (STIs) before and after educational interventions.

The data analysis will be conducted in a comparative manner, evaluating indicators before and after the implementation of programs such as the PSE, contextualizing the results in the light of regional sociocultural factors and considering the structural and cultural limitations that may interfere with the effectiveness of the policies.

2.1 FUNDAMENTAL CONCEPTS ABOUT SEXUAL BEHAVIORS AND VIOLENCE IN ADOLESCENCE

Adolescence is a crucial phase in human development, characterized by profound biological, psychological, and social transformations. During this period, young people begin to explore their sexuality, often without adequate support and guidance, which exposes them to risky behaviors, such as pregnancy, vulnerability to HIV and other Sexually Transmitted Infections (STIs) (Costa et al., 2013). In Brazil, the promotion of actions that compromise well-being among adolescents, including the prevention of STIs and HIV, continues to be a significant challenge for public health, requiring effective policies and programs to educate and protect this population group (Neves and Romero, 2017).

The importance of focusing on early interventions for adolescents is justified by the fact that such actions can significantly reduce the incidence of STIs and HIV, in addition to promoting healthy behaviors that last throughout adult life, with a positive impact on public health in the long term (Diclemente et al., 2007). It is in this context that the School Health Program (PSE) is inserted, an intersectoral initiative established in 2007 to promote the health of students in the public school system throughout the country. Among its main objectives is the prevention of violent behavior, with a focus on the prevention of STIs, HIV and teenage pregnancy through educational actions (Paiva et al., 2006).

However, the implementation of the PES faces significant challenges and the effectiveness of its interventions varies considerably between different regions of Brazil, reflecting socioeconomic and cultural disparities (Costa et al., 2013). In Ceará, the limitations include difficulties in the training process of health and education professionals and the resistance of students and their families to preventive activities (Dias et al., 2020).

The theme of education in behaviors related to sexual health and violence has always been controversial in Brazil, with marked influences from the Catholic Church and, later, from the Evangelical Churches, which shaped the school curriculum. The debate on how sexuality should be addressed in schools has evolved over the decades, resulting in a broader and more inclusive understanding, which takes into account the biological, sociocultural, and psychological dimensions of sexuality (Bartasevicius and De Campos Miranda, 2019).

Risk behaviors for adolescents is defined by the WHO as a state of complete physical, mental and social well-being in relation to sexuality and reproduction, and not just the absence of disease or infirmity. This definition encompasses important aspects such as the right to access accurate information about sexuality, the possibility of conscious and informed choices about one's own body, as well as the right to access health services that meet the needs of each adolescent in a safe and confidential way (Spinola, 2020).

For the WHO, ensuring behaviors related to sexual health and violence in adolescents is essential for healthy and integral development, since this phase of life is characterized by

intense biological, emotional and social changes, which influence behaviors and long-term decisions (Campos et al., 2013). In Brazil, reproductive and sexual health policies for adolescents are structured in line with WHO guidelines and promote the development of intersectoral actions, such as the School Health Program (PSE), which aims to integrate health and education to promote risk prevention and self-care.

These policies recognize that adolescents are a vulnerable group and seek to strengthen their access to information and services that reduce risks such as early pregnancy, Sexually Transmitted Infections (STIs), and other risk behaviors associated with the lack of sex education and accessible health resources. The National Policy for Comprehensive Health Care for Adolescents and Young People (PNAISAJ) of the Ministry of Health, for example, highlights the importance of training health professionals to address these issues with respect and acceptance, promoting a safe environment for care (SaúDe and EducaçãO, 2017). Ensuring behaviors related to sexual health and violence among adolescents is, therefore, a central element of Brazilian public policies and a priority for the promotion of comprehensive health in this population.

Education in actions related to sexual health and violence prevention can provide short to long-term impact, both at the individual and collective levels. Access to content that addresses body self-knowledge, self-care, conception and contraceptive methods, STI/HIV, sexual and reproductive rights, contributes to the development of healthy habits and behaviors in adolescents; respect for one's own body and that of one's partners; the healthy experience of sexuality, without fear, guilt, shame or false beliefs; the ability to choose if and when they want to have children; the meaning and importance of protected sexual intercourse and how to protect yourself.

2.2 LAWS AND NORMS THAT SUPPORT SEX EDUCATION IN SCHOOL

Established in 2007 by Presidential Decree 6,286 of 2007, the School Health Program (PSE) is intended to operationalize rights provided for in various Brazilian legislations in the areas of health and education. "The PSE is a strategy for the integration of health and education for the development of citizenship and the qualification of Brazilian public policies" (SaúDe and Brasil, 2007), based on the articulation between school and primary health care, aiming to promote health and integral education for children, adolescents, young people and adults in Brazilian public education.

The Federal Constitution provides for the full development of the person, preparation for the exercise of citizenship and qualification for work (Article 205), it also establishes that it is the responsibility of the State to provide educational and scientific resources for the

exercise of the right to family planning (Article 226, § 7); it also determines that "it is the duty of the family, society and the state to children and adolescents, with absolute priority", the right to health and education, among others (Do Brasil, 1988).

Law 9.394/96, of Guidelines and Basa of National Education (LDB) established themes to be worked on in a transversal way in the school curriculum, including health and Sexual Orientation. The inclusion of Sexual Orientation as a cross-cutting theme is a "pedagogical intervention that aims to transmit information and problematize issues related to sexuality focusing on the sociological, psychological and physiological dimensions of sexuality without imposing certain values on others. The Sexual Orientation work aims to provide young people with the possibility of exercising their sexuality in a pleasurable way; three fundamental axes are proposed to guide the teacher's intervention: Human Body, Gender Relations and STI Prevention

Federal Law 8.069/90, Statute of the Child and Adolescent (ECA) "recognizes them as subjects of rights, and care for adolescents (12 years and over) must be ensured through the Unified Health System, ensuring universal and equal access to actions and services for health promotion, protection and recovery. Through the implementation of the PSE, it seeks to establish the intersectoriality of the public health and education networks, as well as other social networks, to promote health and comprehensive education through the actions of the Program.

Interministerial Ordinance No. 796/92, authored by the Ministries of Health and Education, regulates the implementation of educational projects aimed at the prevention of HIV/ AIDS in all Brazilian schools, addressing aspects of transmission and prevention of infection. The Ordinance establishes that educational projects must cover official and private networks at all levels and have the support of the services that make up the Unified Health System (Article 2).

The enactment of Law 9.394/96 imposed the need to reformulate and adapt the curricula of basic and higher education, so that they could meet the principles and objectives provided for in the LDB for these levels of education. As a result, the federal government published, in 1998, the National Curriculum Parameters PCN), a collection of 10 volumes that address curricular guidelines for the areas of knowledge and for the development of cross-cutting themes of education in elementary education, covering the 6th to the 9th grade. Among these cross-cutting themes, Sexual Orientation and Health stand out for the study we are carrying out.

The PCN were and still are very important because they bring objectives and goals for basic education at the national level and, at the same time, provide teachers with subsidies

for reflection and discussion of daily pedagogical practice. These documents constitute a milestone in sexual and reproductive education and prevention of STI/HIV because, after decades of resistance to the inclusion of this topic in the school curriculum, they made it possible for the subject to be taught in many Brazilian schools.

The National Common Curriculum Base (BNCC) was established by the Resolution of the National Council of Education - CNE/ CP No. 2, of December 2, 2017. It established the organic and progressive set of essential learning that all students must develop throughout the stages and modalities of Basic Education, with the objective of guaranteeing them learning and development rights, in accordance with what is in the National Education Plan (PNE) (Oliveira and Vidal, 2020; Martins et al., 2023).

The document applies exclusively to school education, as defined in § 1 of Article 1 of the Law of Guidelines and Bases of National Education (LDB, Law No. 9,394/1996) and is guided by ethical, political and aesthetic principles that aim at integral human formation and the construction of a just, democratic and inclusive society, as based on the National Curriculum Guidelines for Basic Education (Brazil, 1996). The table below exposes the division by teaching areas and the related competencies that need to be developed by students.

Frame 1 - Teaching area and health-related skills.

COMPETENCE	AREA	ACTIONS
General	Basic education	To know oneself, appreciate oneself and take care of one's physical and emotional health, understanding oneself in human diversity and recognizing one's emotions and those of others, with self-criticism and the ability to deal with them.
Specific	Mathematics and its technologies for high school	Propose or participate in actions to investigate challenges of the contemporary world and make ethical and socially responsible decisions, based on the analysis of social problems, such as those related to health situations, sustainability, the implications of technology in the world of work, among others, mobilizing and articulating concepts, procedures and languages specific to Mathematics.
	Natural Sciences and their technologies for high school	To reflect, critically, on the relationships between the performance of bodily practices and the health/disease processes, including in the context of work activities. To enjoy bodily practices autonomously to enhance involvement in leisure contexts, expand sociability networks and health promotion.
	Natural Sciences for elementary school	Knowing, appreciating and taking care of oneself, one's body and well-being, understanding oneself in human diversity, making oneself respected and respecting the other, using the knowledge of natural sciences and their technologies. Act personally and collectively with respect, autonomy, responsibility, flexibility, resilience and determination,

		using the knowledge of the natural sciences to make decisions regarding scientific, technological and socio-environmental issues and regarding individual and collective health, based on ethical, democratic, sustainable and solidary principles.
	Religious Education for Elementary School	Analyze the relationships between religious traditions and the fields of culture, politics, economics, health, science, technology and the environment.
	Mathematics and its technologies for high school	Propose or participate in actions to investigate challenges of the contemporary world and make ethical and socially responsible decisions, based on the analysis of social problems, such as those related to health situations, sustainability, the implications of technology in the world of work, among others, mobilizing and articulating concepts, procedures and languages specific to Mathematics.

Source: BNCC, 2018.

The Referential Curriculum Document of Ceará (DCRC) for Early Childhood Education, Elementary Education and High School is the result of a collective and democratic construction, prepared from the Collaboration Regime between the MEC, the National Council of Secretaries of Education (Consed) and the National Union of Municipal Education Directors (Undime). This framework presents aspects that guide and subsidize educational institutions in the preparation, development and evaluation of their pedagogical proposals, with the objective of offering a humanized and quality educational service. The framework defines the essential knowledge brought in the BNCC that students are entitled to learn, year by year, and presents the competencies that must be developed and guided in learning in all areas of knowledge and their respective Curricular Components (Oliveira and Vidal, 2020; Martins et al., 2023; De Sousa Moura, 2025).

In part III of the document, we find the Integrating Themes with a Transversal Approach, including Gender Relations. In the document, we can see that sex education is in the proposal, so it makes it possible to incorporate sex education in schools, both elementary and high school (Martins et al., 2023).

The Fortaleza Referential Curriculum Document (DCRFor): include, educate and transform is a curricular reference document that presents the curriculum guidelines of the municipal education network of Fortaleza. The document is subdivided into several fascicles, with the purpose of establishing the normative, theoretical, and methodological precepts, as well as the structuring principles that guide the construction of the curricula and guide the pedagogical work to be developed (Oliveira and Vidal, 2020; Martins et al., 2023; De Sousa Moura, 2025).

This document is the result of the requirement for updates of the state and municipal curricula presented by the National Common Curriculum Base (BNCC), having as a reference

document the Referential Curriculum Document of Ceará (DCRC) (Oliveira and Vidal, 2020; Martins et al., 2023). The DCRFor is composed of nine volumes that present the guidelines for the curricular planning of the schools-organization, articulation between knowledge, propositions and development of actions and evaluation processes, constituting a pedagogical proposal - considering, for this, the diverse contexts in which the schools are inserted, in order to guarantee the necessary learning for each stage and modality.

In the context of our research, we highlight volume n° 9, which refers to citizenship, diversity and inclusion, which we consider an advance in the field of current sex education. This issue presents the integrative (transversal) themes and guides education professionals from the municipal school system of Fortaleza regarding their application in inter, multi and transdisciplinary dimensions. This issue is organized into integrating themes distributed in three major axes. The theme Gender and sexuality diversity is located in the first axis (A).

We would like to emphasize that the theme Health and health promotion according to the Ottawa Charter, 1986, is also contemplated in this document as an integrating theme, which recommends that students' health care should cover all vulnerabilities that compromise the full development of children, adolescents and young people, as recommended by the PSE (Organization, 2002; Brazil and Republic, 2007; Oliveira and Vidal, 2020).

2.3 INDICATORS OF SEXUAL BEHAVIOUR AND RISK BEHAVIOUR, INCLUDING VIOLENCE, OF ADOLESCENTS

Indicators of behaviors related to sexual health and violence among adolescents, such as the rate of early pregnancy, use of contraceptive methods and the incidence of Sexually Transmitted Infections (STIs), are essential to assess health conditions and the impact of public policies aimed at young people. In Brazil, the PSE uses these indicators to monitor and evaluate actions to promote behaviors related to sexual health and violence in public schools. WHO and PAHO offer recommendations and guidelines for each of these indicators, promoting an intersectoral approach to adolescent health promotion (Langford et al., 2014).

2.3.1 Adolescent Pregnancy Rate

Early pregnancy represents a significant risk to the health and development of adolescents, impacting school continuity, increasing poverty and can cause health complications for both mother and baby. According to the WHO, to deal with the high rate of adolescent pregnancy, it is essential that countries implement integrated sex education programs and offer easy access to contraceptive methods (Campos et al., 2013).

WHO recommends that countries implement comprehensive sexuality education programs that address healthy development, informed decision-making, and family planning to prevent early pregnancy among adolescents. At the same time, it highlights the importance of respecting the representative rights of adolescents and encourages policies that promote autonomy over one's own sexuality and awareness of reproductive rights (Campos et al., 2013; Langford et al., 2014).

PAHO advises that sexual reproductive health services be created and made accessible to adolescents, offering adequate support, with safe and confidential care (Gondim et al., 2015).

2.3.2 Use of Contraceptive Methods Among Adolescents

Evidence from national and international studies indicates that sex education programs in schools are effective in preventing Sexually Transmitted Infections (STIs) and reducing early pregnancy rates among adolescents. In Brazil, a study showed that adolescents who participated in sex education programs had greater knowledge about STI prevention and contraceptive methods, as well as a more responsible attitude towards sexual behavior (Campos et al., 2013). This study found a 20% reduction in the incidence of STIs and a significant decrease in early pregnancy rates among adolescents who had access to structured sex education programs. These results reinforce the importance of sex education in the school environment, which allows adolescents to make informed and conscious decisions about their health.

On the international scene, evidence also corroborates the benefits of sex education for adolescents. A meta-analysis conducted by the WHO that evaluated sexuality education programs in 10 countries showed that these programs are effective in reducing risk behaviors among young people and promote the use of contraceptive methods, especially in countries that adopt comprehensive and evidence-based curricula (Who, 2016). In addition, the study highlighted that adolescents who receive adequate sex education tend to delay sexual initiation, which contributes to the reduction of teenage pregnancy and STIs, such as HIV. Another study by the United Nations Educational, Scientific and Cultural Organization (UNESCO) confirmed that comprehensive sexuality education programs in schools result in more informed adolescents who are less prone to risky behaviors, and pointed out that the benefits extend throughout the lives of young people, favoring self-care practices and greater use of condoms (Santos and Ribeiro, 2020).

The use of contraceptive methods is a crucial indicator to assess the ability of adolescents to exercise autonomy in their reproductive health. Low rates of contraceptive use

reflect a lack of access to health information and services. According to PAHO, it is essential that public policies aim to improve access to contraceptive methods and offer guidance tailored to the needs of young people (Gondim et al., 2015).

The WHO suggests that health systems make contraceptive methods available free of charge and affordably, with a focus on safety and suitability for adolescents (Langford et al., 2014). PAHO and WHO also suggest that health professionals be qualified to offer non-discriminatory services and appropriate guidance to adolescents on contraceptive methods, encouraging safe and consistent use (Campos et al., 2013; Gondim et al., 2015).

2.3.3 Incidence of Sexually Transmitted Infections (STIs) Among Adolescents

STIs are a critical public health issue, especially among adolescents, who often have little or no information about prevention. As a result, this population is more exposed to risk behaviors and illness, as can be observed by analyzing the evolution of STI/HIV infection rates among adolescents over the last few years (Campos et al., 2013).

In Brazil, according to the HIV and AIDS epidemiological bulletin, Special Issue of December 2024, there was an increase in HIV/AIDS cases among adolescents and young people in the age group of 15 to 29 years. The data released in the document highlight the need for continuous public policies aimed at this age group, focusing on prevention, early diagnosis, and access to treatment (Brasil and SaúDe, 2024).

In this sense, we also emphasize that the constant growth in cases of HIV AIDS and syphilis, shown over time in several epidemiological bulletins previously released, point to the urgent intensification of prevention and sexuality education activities in this age group (Langford et al., 2014; Pereira and AraÚJo, 2020).

WHO highlights the need to address STI transmission and prevention in an integrated way with other youth health policies. It recommends that educational programs address the transmission of STIs and HIV in detail through educational campaigns with messages adapted to adolescents, promoting the practice of protected sex and raising awareness about the importance of self-care and prevention (Rotheram-Borus et al., 2000). PAHO, in addition to these UN-defined measures, suggests that access to STI testing and treatment be expanded for adolescents, including the provision of condoms and regular counseling in health facilities and schools (Gondim et al., 2015).

The following is a detailed table with regional case studies that illustrate the implementation and impacts of public policies on sex education in Ceará.

Chart 01 - Regional case studies illustrating the implementation and impacts of public policies on sex education in Ceará.

Study	Year	Goal	Findings	Lessons Learned
DE SOUSA MOURA, F. N.	2025	To analyze the interdisciplinary possibilities of education for sexualities in the Referential Curriculum Document of Ceará.	It was identified that the DCRC proposes an interdisciplinary approach to sex education, integrating different areas of knowledge.	The importance of an interdisciplinary approach to make sex education effective in schools.
DIAS, B. C. D. et al.	2020	To evaluate the process of training professionals in the municipality of Crato, Ceará, within the scope of the School Health Program (PSE).	It was found that the training of professionals was fundamental for the effective implementation of the PSE, despite challenges such as resistance from some sectors of the community.	The need for continuous training of professionals and the involvement of the community for the success of the PSE.
MARTINS, R. M. et al.	2023	To carry out a comparative analysis of Physical Education in the Basic Knowledge Matrix and in the Referential Curriculum Document of Ceará, considering the BNCC and the pandemic context.	It was observed that there was repetition of skills in the CBM, indicating a possible break with interdisciplinarity, while the DCRC presented an approach more focused on body practices.	The importance of aligning curriculum documents to promote an interdisciplinary and practical approach in Physical Education.
OLIVEIRA, A. G. L. S.; VIDAL, E. M.	2020	Discuss the implementation of the Referential Curriculum Document of Ceará (BNCC) in collaboration.	It was found that collaboration between state and municipal governments was essential for the implementation of the DCRC in 184 municipalities, covering public and private networks.	The collaboration regime is fundamental for the effective implementation of large-scale educational policies.

These case studies provide valuable insights into the practices and challenges faced in the implementation of public policies for sex education in Ceará, highlighting the importance of interdisciplinarity, professional training, and intergovernmental collaboration. The analysis of regional studies carried out in Ceará reveals both significant convergences and divergences in the implementation of public policies for sex education. The studies offer a comprehensive view of different dimensions of the educational process focused on sexual and reproductive health, allowing a rich comparison between contexts, approaches, and results (Dias et al., 2020; Oliveira and Vidal, 2020; Martins et al., 2023; De Sousa Moura, 2025).

A common point among the studies is the valorization of interdisciplinarity as a structuring axis of sex education in schools. There is an emphasis on the importance of the transversal approach in the Referential Curriculum Document of Ceará (DCRC), highlighting how sexualities can be treated in an integrated way in different areas of knowledge (De Sousa Moura, 2025). This view is corroborated by Martins et al. (2023), who, although they focus specifically on the discipline of Physical Education, also recognize the need for curricular

alignment that promotes the articulation between knowledge, especially after the reformulations required by the BNCC. However, Martins et al. also point out weaknesses in this regard, identifying a repetition of skills in the Basic Knowledge Matrix (BCM), which can compromise the interdisciplinary coherence recommended by the DCRC (Martins et al., 2023).

Another common element is the emphasis on the training of professionals as a critical success factor. The application of the School Health Program (PSE) in the municipality of Crato, observe that the training of health and education professionals was decisive to make educational actions viable, although there was resistance from some students and families (Dias et al., 2020). This perspective is complemented by the perception that joint work and dialogue between the spheres of government are fundamental not only to disseminate curricular references, but also to ensure continuing education and technical support to schools (Oliveira and Vidal, 2020).

In terms of divergences, the most notable concern the specific contexts and approaches of each study. There is a pedagogical and curricular perspective focused on the approach to sexualities in the DCRC (De Sousa Moura, 2025), as well as institutional practice, analyzing the direct impact of PSE actions on municipal schools (Dias et al., 2020) and a critique of the pandemic implementation of curricula, suggesting that the moment of transition and adaptation may have weakened the coherence of curricular proposals, especially in Physical Education (Martins et al., 2023).

These analyses reveal that, although curriculum documents offer a consistent and progressive normative framework, their effectiveness depends on factors such as intergovernmental articulation, the receptivity of school communities and, above all, the technical and pedagogical training of the professionals involved. Thus, the studies reinforce the idea that the consolidation of sex education in schools requires more than well-structured guidelines: it also requires institutional commitment, technical support and constant dialogue with the different actors in the educational process.

2.3.4 Comparison of adolescents' sexual health indicators before and after the implementation of educational programs

The comparison of sexual health indicators among adolescents before and after the implementation of sex education programs reveals significant advances, especially with regard to the reduction of Sexually Transmitted Infections (STIs) and cases of early pregnancy. Before the introduction of comprehensive educational programs, national and international studies pointed to an alarming trend of risk behaviors among young people,

including unprotected sexual intercourse and little knowledge about contraceptive methods. In Brazil, for example, data from PeNSE in 2009 showed that a large portion of adolescents were unaware of basic preventive practices and did not have adequate access to information about contraception, which resulted in high rates of STIs and teenage pregnancy (Cornellà I Canals, 2010; Campos et al., 2013).

After the implementation of sex education programs in schools, such as those promoted by the School Health Program (PSE), these indicators showed substantial improvement. More recent studies have shown that the inclusion of topics such as violent behavior, STI prevention, and the use of contraceptive methods in school curricula has contributed to increased adherence to the use of condoms and other contraceptives, in addition to raising the level of knowledge among adolescents about the risks and importance of self-care (Penna, 2010; Campos et al., 2013; Oliveira et al., 2017; Menezes and SaúDe, 2020). In a comparison between PeNSE data from 2009 and 2019, there is a reduction in the rate of early pregnancy and a greater awareness of safe practices, with a significant increase in the use of condoms among young people ((Ibge), 2021). This evolution demonstrates the positive impact of educational programs, indicating that well-structured and intersectoral policies are essential to promote the health and autonomy of adolescents, thus reducing risk behaviors in the long term.

Table 1 - Comparison of pre- and post-PES indicators (2009 vs. 2019)

INDICATOR	2009 (%)	2019 (%)	VARIATION
Teenage pregnancy	25,0	18,0	↓ 28%
Use of condoms	58,0	75,0	↑ 29%
HIV diagnoses	5,2	7,1	↑ 36%

In a comparison between PeNSE data from 2009 and 2019, there is a reduction in the rate of early pregnancy and a greater awareness of safe practices, with a significant increase in the use of condoms among young people ((Ibge), 2021). This evolution demonstrates the positive impact of educational programs, indicating that well-structured and intersectoral policies are essential to promote the health and autonomy of adolescents, thus reducing risk behaviors in the long term.

3 FINAL CONSIDERATIONS

Sex education is a pillar for adolescent development and public health. While the PES and recent policies represent advances, it is urgent to overcome gaps in implementation and ensure equity. The articulation between civil society, schools and governments is essential to consolidate rights and reduce vulnerabilities.

However, considerable challenges still remain, such as cultural resistance to sex education, regional inequalities in the execution of policies, and the continuous need to train professionals trained to deal with the issue with sensitivity and technical knowledge. To ensure more consistent progress, it is essential that intersectoral actions are strengthened and that dialogue with society is expanded about the importance of sex education in the citizenship formation of young Brazilians.

REFERENCES

1. Bartasevicius, D. M. M., & de Campos Miranda, M. A. G. (2019). Formação de professores para a prática de educação sexual nas escolas. Sisyphus: Journal of Education, 7(3), 156–178. https://doi.org/10.25749/sis.17260
2. Brasil. (1988). Constituição da República Federativa do Brasil. Senado Federal, Centro Gráfico.
3. Brasil. (1992). Portaria Interministerial nº 796, de 29 de maio de 1992. Ministérios da Saúde e Educação.
4. Brasil. (1996). Lei nº 9.394, de 20 de dezembro de 1996: Estabelece as diretrizes e bases da educação nacional. Diário Oficial da União.
5. Brasil. (2007). Decreto nº 6.286, de 5 de dezembro de 2007: Institui o Programa Saúde na Escola (PSE). Diário Oficial da União.
6. Brasil, Ministério da Saúde. (2007). Escolas promotoras de saúde: Experiências do Brasil. Organização Pan-Americana de Saúde.
7. Brasil, Ministério da Saúde. (2017). Portaria Interministerial nº 1.055, de 25 de abril de 2017: Redefine as regras e os critérios para adesão ao Programa Saúde na Escola (PSE). Diário Oficial da União.
8. Brasil, Ministério da Saúde. (2020). Programa Saúde na Escola (PSE): Guia operacional. Ministério da Saúde.
9. Brasil, Ministério da Saúde. (2024). Boletim epidemiológico: HIV e AIDS (Número Especial de Dezembro). Ministério da Saúde.
10. Campos, H. M., Schall, V. T., & Nogueira, M. J. (2013). Saúde sexual e reprodutiva de adolescentes: Interlocuções com a Pesquisa Nacional de Saúde do Escolar (PeNSE). Saúde em Debate, 37(99), 336–346. https://doi.org/10.1590/S0103-11042013000400003
11. Cornellà i Canals, J. (2010). La sexualidad en la adolescencia. Medicine: Programa de Formación Médica Continuada Acreditado, 10(61), 4191–4195. https://doi.org/10.1016/S0304-5412(10)70476-0
12. Costa, A. C. P. D. J., & Others. (2013). Vulnerability of adolescent students to STD/HIV in Imperatriz-Maranhão. Revista Gaúcha de Enfermagem, 34(4), 179–186. https://doi.org/10.1590/S1983-14472013000400023
13. D'Aurea-Tardeli, D. (2009). Adolescência, personalidade e projeto de vida solidário. In Crise de valores ou valores em crise (pp. 70–88).
14. de Sousa Moura, F. N. (2025). Possibilidades interdisciplinares da educação para as sexualidades no Documento Curricular Referencial do Ceará. Ensino em Perspectivas, 6(1), 1–19.
15. de Sousa, P. M. L. (2006). Desenvolvimento moral na adolescência.
16. Dias, B. C. D., & Others. (2020). Programa Saúde na Escola (PSE): O processo de formação dos profissionais no município do Crato, Ceará, Brasil. Brazilian Journal of Development, 6(9), 64188–64201. https://doi.org/10.34117/bjdv6n9-103
17. DiClemente, R. J., Salazar, L. F., & Crosby, R. A. (2007). A review of STD/HIV preventive interventions for adolescents: Sustaining effects using an ecological approach. Journal of Pediatric Psychology, 32(8), 888–906. https://doi.org/10.1093/jpepsy/jsm042
18. Eisenstein, E. (2005). Adolescência: Definições, conceitos e critérios. Adolescência e Saúde, 2(2), 6–7.
19. Gondim, P. S., & Others. (2015). Acessibilidade dos adolescentes às fontes de informações sobre saúde sexual e reprodutiva. Revista Brasileira de Crescimento e Desenvolvimento Humano, 25(1), 50–53.
20. Instituto Brasileiro de Geografia e Estatística. (2021). Pesquisa Nacional de Saúde do Escolar: 2019. IBGE.
21. Langford, R., & Others. (2014). The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement.

Cochrane Database of Systematic Reviews, (4), Article CD008958. https://doi.org/10.1002/14651858.CD008958.pub2
22. Martins, R. M., & Others. (2023). A educação física na matriz de conhecimentos básicos e no Documento Curricular Referencial do Ceará: Uma análise comparativa implicada pela BNCC a partir do contexto pandêmico. Corpoconsciência, Article e15038. https://doi.org/10.51202/corpoconsciencia.2023.e15038
23. Moreira, J. O., Rosário, Â. B., & Santos, A. P. (2011). Juventude e adolescência: Considerações preliminares. Psico, 42(4), 457–464. http://revistaseletronicas.pucrs.br/ojs/index.php/revistapsico/article/viewFile/8943/7450
24. Neves, M. B., & Romero, L. C. (2017). A política brasileira de prevenção da síndrome da imunodeficiência adquirida na escola (1994-2014) e o papel da Organização das Nações Unidas para a Educação, a Ciência e a Cultura. Educação & Sociedade, 38(141), 983–997. https://doi.org/10.1590/ES0101-73302017181492
25. Oliveira, A. G. L. S., & Vidal, E. M. (2020). A implementação do Documento Curricular Referencial do Ceará (BNCC) em regime de colaboração. Brazilian Journal of Development, 6(4), 19776–19784. https://doi.org/10.34117/bjdv6n4-243
26. Oliveira, M. M. D., & Others. (2017). Características da Pesquisa Nacional de Saúde do Escolar (PeNSE). Epidemiologia e Serviços de Saúde, 26(3), 605–616. https://doi.org/10.5123/S1679-49742017000300019
27. Paiva, V., Pupo, L. R., & Barboza, R. (2006). The right to prevention and the challenges of reducing vulnerability to HIV in Brazil. Revista de Saúde Pública, 40(Suppl.), 109–119. https://doi.org/10.1590/S0034-89102006000800015
28. Penna, G. O. (2010). Pesquisa Nacional de Saúde do Escolar (PeNSE).
29. Pereira, M. E. A., & Araújo, L. (2020). Gênero e diversidade na escola: Formação de professoras/es em gênero, sexualidade, orientação sexual e relações étnico-raciais. Presidência da República do Brasil. ISBN 978-85-89737-11-1.
30. Rotheram-Borus, M. J., & Others. (2000). Prevention of HIV among adolescents. Prevention Science, 1(1), 15–30. https://doi.org/10.1023/A:1010077931918
31. Santos, T. P., & Ribeiro, G. L. (2020). Educação sexual e barreiras culturais: A implementação de programas de saúde sexual no Brasil. Saúde e Sociedade, 29(4), 1452–1465. https://doi.org/10.1590/S0104-12902020200402
32. Silva, J., & Others. (2021). Sexual diversity: A perspective on the impact of stigma and discrimination on adolescence. In Ciência & Saúde Coletiva (Vol. 26, pp. 2643–2652). https://doi.org/10.1590/1413-81232021266.16602021
33. Spinola, M. C. R. (2020). Fatores associados a iniciação sexual precoce de adolescentes em Santarém, Pará. SANARE: Revista de Políticas Públicas, 19(1).
34. World Health Organization. (2002). Carta de Ottawa.
35. World Health Organization. (2016). Prevención de la violencia. http://www.who.int/violence_injury_prevention/violence/es/