



Research article

Characteristics of emotional and sexuality education programs in the Spanish school population

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ABSTRACT

Sexuality education should be integrated into educational centers as a human right of children and adolescents, and an international recommendation based on scientific evidence. This study sought to identify the sexuality education interventions that were carried out in Spain in year 2021–2022, and to analyze whether they are in line with best practice recommendations. A descriptive study was carried out, considering organization territorial called Autonomous Communities as the unit of study, through key informants identified by purposive sampling. The variables used were based on international recommendations and the information was collected via a telephone questionnaire, by e-mail or by consulting websites referenced by the key informant. Fifteen of 17 Autonomous Communities had sexuality education interventions. Most were programs and only three had optional curricular subjects. Ninety-four percent were aimed at secondary school and were taught by teachers (72 %). Only one program had an impact evaluation and only 28 % complied with best practice recommendations. The voluntary or optional nature of the interventions reduces their scope, which is usually limited to secondary school students. It is necessary to implement mandatory curricular subjects, with a focus on sexual rights and gender.

1. Introduction

Health Education (HE) is a planned and systematic teaching-learning process oriented at the acquisition, selection, and maintenance of healthy practices. Within HE, Comprehensive Sexuality Education (CSE) seeks to empower young people for a life of health, wellbeing, and dignity, with affectionate social and sexual relationships, taking responsibility for their choices while being aware of their rights and how to protect them [1].

CSE is a school-based curriculum process for teaching and learning about the cognitive, emotional, physical, and social aspects of sexuality in childhood and adolescence [1], with rigorous, realistic, and unbiased scientific information [1,2]. As early as 2010, the World Health Organization (WHO) [2] advocated the need for CSE to be recognized as a compulsory curricular subject.

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Sexuality education in schools [1,2], with a focus on sexual and reproductive rights and a gender perspective, has demonstrated to have a significant positive effect on knowledge, attitudes, and behaviors, with a delay in the initiation of sexual relations and an increase in the use of contraceptive methods, as well as a reduction in the rates of Sexually Transmitted Infections (STIs) and unwanted pregnancies [1,3–8].

CSE in childhood and adolescence is a key element in sexual health, supporting the well-being of individuals and the social and economic development of communities and countries [2,9]. Furthermore, the international community has ratified CSE as a right [10], and a human right according to the United Nations [1,2,8,11,12], whose International Commission on Population and Development, in its Resolution 2012/1, on adolescents and youth, urged governments to provide comprehensive education on human sexuality, sexual and reproductive health and gender equality. This is one of the targets of the Sustainable Development Goals (SDGs) and in 2017, the UNESCO determined that the strategic priority for the fulfillment of these HE objectives was to ensure that children and young people receive comprehensive and quality school-based sexuality education.

At the European Union level, in 2002, the European Parliament approved Resolution 2001/2128(INI) on sexual and reproductive health, emphasizing the inclusion of sexuality education in formal education.

In Spain, to adapt the regulations to the consensus of the international community and European recommendations, Organic Law 2/2010, on sexual and reproductive health and voluntary interruption of pregnancy was approved, which regulated sexuality education in educational centers “as part of the integral development of the personality and the formation of values”. In the educational system, the recent Organic Law 3/2020 proposes to promote emotional-sexual education in a cross-cutting manner and incorporates specific objectives in Compulsory Secondary Education (ESO). However, at the curricular level, sexuality education is not incorporated as a subject, nor as part of any subject. The same situation occurred in previous regulations, in which sexuality education was reduced to isolated topics in some subjects but was not specifically contemplated in the educational curriculum or in textbooks [13,14].

Spain is made up of 17 Autonomous Communities or regions, known in Spain as ‘Comunidades Autónomas’. Autonomous communities are self-governing territorial organizations similar to states in other countries.

The Spanish education system is supported by the national government and the individual governments of each of the 17 Autonomous Communities in Spain, and therefore educational competencies are transferred to each Autonomous Community.

The impact of the COVID-19 pandemic on sexual and reproductive health influenced adolescents and young people, necessitating new strategies to continue sexuality education in a context of social distancing. Nowadays, this population faces several challenges related to sexuality: insufficient knowledge about sexual and reproductive health, gender-based violence, unwanted early pregnancies, stigma and discrimination based on their gender identity or sexual orientation, as well as inadequate access to sexual health services, which hinders the prevention and treatment of sexually transmitted diseases [15–17].

CSE facilitates the construction of knowledge through objective, comprehensive and rigorous information at the biological, psychological, and social levels, promoting the acquisition of positive attitudes of respect and responsibility, understanding sexuality as a human dimension and source of health [3–8]. In addition, it is a right of children and adolescents [1,2,8,11,12], and is contemplated in the current legislation, therefore, it should be universal and compulsory. Its incorporation into the educational system is a challenge to ensure a comprehensive education of children and adolescents that can also improve their health, physical and emotional well-being, and influence the improvement of academic performance [1,2].

The following are recommended as good practices in CSE in educational institutions: 1) selecting capable and motivated educators to implement the curriculum, 2) providing educators with quality training and assistance in management, guidance and supervision on an ongoing basis, 3) material that allows sequential sessions to be conducted over several years, 4) comprehensive sexuality education interventions (the program includes several topics, and does not solely focus on risk prevention), 5) implement programs that include at least twelve sessions, 6) employ pedagogical methods based on the active participation of students, 7) evaluate follow-up, and 8) evaluate the impact of the intervention [1].

The aim of this study was to identify the sexuality education interventions that were carried out in the educational setting in Spain in the year 2021–2022, and to analyze whether they are in line with best practice recommendations.

2. Methods

2.1. Type of study

A descriptive cross-sectional study was carried out. Given that, in Spain, educational competencies are transferred to the Autonomous Communities, this territorial scope was the unit of study.

2.2. Source of data

The main variables were obtained through key informants, as a method of approaching the social reality under study due to the quality of the data that these informants can convey [18,19]. The selection criteria were determined by their relation to the object of study and their accessibility, according to purposive sampling [18]. Thus, the inclusion criteria used was autonomous technical personnel who were responsible for sexuality education in schools in their Autonomous Community.

The selection of key informants was carried out with the collaboration of the Spanish Ministry of Health, which informed the regional representatives of the Technical Committee of the National Strategy for Sexual and Reproductive Health about the study. Thus, a list was obtained detailing technical personnel in charge of health education, sexual health and/or sexuality education in Spanish schools in each Autonomous Community. Based on these professionals, key informants were identified per Autonomous

Community, belonging to the Ministries of Health and/or Education.

We identified the key informant in each of the Autonomous Communities of Spain. These key informants were selected based on their roles as technical staff in charge of health education, sexual health and/or sexuality education in their respective regions.

Regarding the determination of the sample size, we employed a purposive sampling method to ensure that we included a diverse range of perspectives from professionals involved in health and sexuality education. The selection criteria were based on the informants' expertise, their roles within the Ministries of Health and/or Education, and their involvement in the implementation and management of sexuality education programs.

To ensure the inclusion of diverse perspectives, we aimed to select key informants from different regions and with varying levels of experience and responsibilities. This approach allowed us to capture a comprehensive view of the challenges and successes in sexuality education across Spain.

2.3. Inclusion criteria

School sexuality education interventions were selected that were promoted, coordinated, designed and/or implemented by autonomous institutions and aimed at schools in all the Autonomous Communities. These interventions could be specific to sexuality education or broader, although they had to include a thematic block related to sexuality.

Excluded initiatives were those in which schools design their own projects or programs promoted by municipalities or other local entities.

2.4. Variables

The study variables were established in accordance with international recommendations for CSE [1]. Thus, the following recommendations were examined: 1) selection of capable and motivated educators to implement the curriculum, 2) quality training and assistance provided to educators in management, guidance and supervision, on an ongoing basis, 3) material that allows sequential sessions to be conducted over several years, 4) CSE interventions (the program includes several topics, and does not focus solely on risk prevention), 5) implementation of programs that include at least twelve sessions, 6) employment of pedagogical methods based on the active participation of students, 7) follow-up evaluation, and 8) evaluation of the impact of the intervention.

Based on these recommendations, the main variables were organized into the following categories:

- 1) Intervention: the existence of school intervention in sexuality education and type of intervention (program, curricular subject, plan, or strategy).
- 2) Characteristics of the target population for which the programs were intended: targeting the student body (pre-school education from 0 to 6 years old, compulsory primary education from 6 to 12 years old, compulsory secondary education from 12 to 16 years old or Spanish Baccalaureate from 17 to 18 years old), number of proposals/units/teaching sessions and coverage of the intervention.
- 3) Teacher characteristics (the intervention is provided by teachers), training (there are specific training courses on sexuality education for teachers) and didactic material (there is support material for teachers with didactic proposals/units/sessions to take to the classroom).
- 4) Content and methodology: comprehensive (the program includes several topics, and is not only focused on risk prevention), duration (the program is taught for at least two courses and has more than 12 sessions/units/didactic proposals), and methodology (the program proposes participatory methodologies, focused on the active engagement of the student body).
- 5) Follow-up and/or evaluation: (data on participation and/or annual coverage of the program are available) and impact (the impact of the intervention has been measured in terms of knowledge, attitudes, skills and/or sexual behavior at the regional level).

2.5. Data collection

Information was collected by means of a questionnaire, piloted beforehand and reviewed by experts, with open and closed questions related to the study variables (See [Supplementary Table 1](#)). This questionnaire was completed through a telephone interview conducted by the research team with key informants. Subsequently, this information was completed with data sent by e-mail or by consulting websites referenced by the key informant. Data collection took place between March and July 2022.

2.6. Analysis

Qualitative information collected through key informants was analyzed quantitatively, and the data were treated as numerical data and the denominator was the number of interventions identified or the number of Autonomous Communities in Spain. Percentages of compliance for each recommendation were calculated. As a category of analysis, the indicator "programs with a good level of compliance with international recommendations" was created, in which the percentage of programs following six or more of the eight proposed recommendations was calculated. Finally, an analysis by Autonomous Communities was also carried out.

An analysis was made of the adjustment of the content of the educational programs of each Autonomous Community to the best practice recommendations and, subsequently, the degree of compliance with each of the recommendations in the interventions identified in the different Autonomous Communities of Spain.

Microsoft Excel version 365 was used to analyze the rates and trends during the study period. Finally, data for each Autonomous Community were extracted in relation to the study variables, collected on a data collection sheet and subsequently tabulated in a spreadsheet.

3. Results

3.1. Sexuality education interventions

Twenty-six interventions with sexuality education content were identified in 15 of the 17 Spanish Autonomous Communities: 18 were school programs (See [Supplementary Table 2](#)) and eight were curricular subjects (See [Supplementary Table 3](#)).

Regarding the curricular subjects, three Autonomous Communities had eight curricular subjects of free autonomous configuration: four in Asturias, two in Castilla La Mancha and two in Galicia. All were aimed at Secondary Education, except for two: one in Castilla La Mancha, which was for Primary Education, and another in Galicia for Spanish Baccalaureate. These subjects were taught by teachers, with a comprehensive approach (diversity of subjects) and for 30 or more hours per year (See [Supplementary Table 3](#)).

In the case of sexuality education programs, the following results were obtained (See [Supplementary Tables 2 and 4](#)).

3.2. Characteristics of the population

In relation to the target population of the programs, 17 programs (94 %) were aimed at secondary school students, whereas five programs (28 %) were also aimed at pre-school and/or elementary school students.

Teachers were responsible for teaching the contents in 72 % of the programs. In the remaining cases, these were external agents, especially primary care health personnel. In the programs taught by the teaching staff, 46 % offered specific training for teachers and 77 % had their own teaching support material. This material was published and accessible through the website in 61 % of these programs.

3.3. Content and methodology

The comprehensive perspective, with thematic diversity, was present in 55 % of the programs (the rest was focused on aspects mainly related to risks).

Participatory methodologies to work on these contents were recommended by 100 % and only 39 % proposed to intervene in two or more courses, with more than 12 sessions.

3.4. Follow-up and evaluation

Sixty-seven percent of the programs had follow-up actions (although data for participation were made public or available in only 39 %).

In relation to impact, only one program had conducted an impact evaluation, with results on knowledge, attitudes, skills, and sexual behavior.

3.5. Quality of the programs

Excluding curricular subjects, only five programs (28 %) complied with six or more of the selected recommendations: “Ni ogros ni princesas” (Asturias), “Amb tots los sentits” (Balears), “Coeduca’t” (Catalonia), “SKOLAE” (Navarra) and “Programa de Educación Sexual Integral” (Valencia).

3.6. Analysis by Autonomous Communities

Eighty-eight percent of the Autonomous Communities had some type of regional sexuality education intervention in place in schools. The Autonomous Communities with the most interventions were Asturias (with three programs and four subjects) and Galicia (two programs and two subjects).

In relation to the target students, only three Autonomous Communities had interventions for the three educational stages, i.e., Pre-school, Primary and Secondary Education: Catalonia (“Coeduca’t”), Navarra (“SKOLAE”) and Valencia (“Comprehensive Sexuality Education Program”). Three other Autonomous Communities had interventions for two educational stages: Asturias, Castilla La Mancha (both with proposals for Primary and Secondary Education) and the Balearic Islands (Pre-school and Secondary Education). Finally, in nine Autonomous Communities, the interventions were solely aimed at secondary education and in three Autonomous Communities there were no proposals for interventions in schools.

4. Discussion

In Spain, there are different CSE interventions aimed at young people and most of the Autonomous Communities have some proposal for their educational centers. However, it is striking that in two Autonomous Communities (Cantabria and Extremadura)

there is no such educational offer, despite the fact that for more than a decade the law 2/2010, of March 3, on sexual and reproductive health has established in article 5 that “*the public authorities, in the development of their health, educational and social policies, shall guarantee information and education on sexual and reproductive affection in the formal contents of the educational system.*”. More recently, Organic Law 3/2020 advocates the cross-cutting promotion of sexuality education in both primary and secondary education.

The interventions we have encountered, which are highly diverse and different, share the common characteristic of being elective. Even the curricular subjects, which could favor universality, only reach a small percentage of students, given their optional nature. As a result, coverage is limited, and the widest coverage (75 %) is reported by a program provided by external agents with occasional workshops.

Moreover, most of these interventions are aimed at students in Secondary Education, with no sexuality education from an early age, and no continuity between educational stages, nor over time. There are certain issues related to sexuality that are addressed in the educational curriculum of other subjects, however, these are isolated topics that are not always included in textbooks and do not favor a comprehensive perspective [13,14]. In our study, only 39 % of the interventions proposed to intervene in two or more years and covering more than 12 sessions. Only three Autonomous Communities covered all three stages of compulsory education. It is recommended that sexuality education be developed in a continuous manner, based on the acquisition of knowledge throughout life, with sequential sessions over several years, considering the age of the target audience, starting at four years old, and continuing up to 15 years old or older. It has been shown that for a program to have lasting behavioral effects it should include sequential sessions of two- or three-years’ duration followed by reinforcement sessions in later years [1,2]. Addressing the sexuality information needs of students involves covering many topics, and programs with a long-term positive effect include more than 12 50-min sessions [1].

In view of the results of this study, we can affirm that sexuality education is not universally or effectively incorporated, although there are proposals for its implementation with elective programs and optional curricular subjects, based on the commitment of teachers or external agents, as reported in previous studies [20,21]. These studies also show that most of these interventions tend to disappear over time [20,21]. In Spain, curricular subjects are expected to disappear as of the academic year 2022–2023, with the implementation of the educational law currently in force. This new regulation suppresses the subjects of free autonomic configuration and, consequently, the curricular subjects included in this study. Although these subjects were elective, despite recommendations by UNESCO [1] and the WHO [2] stating that these subjects should be compulsory, it still enabled resources, time and a level of quality dedicated to sexuality education. The implementation of these classes, limited by their optional nature, and competition with other elective subjects has had a short time span, since the first classes were approved in the 2018-19 academic year.

In our study, we found that those responsible for CSE in compulsory education are mostly teachers, who are provided with didactic support materials, although in general, they are not offered any specific training. The evidence recommends selecting educators with interest, communication skills and skills in participatory methodology. The lack of these conditions may be overcome through training programs, and by favoring the presence of educators of both genders. The fact that they are part of the teaching staff of the centers is advantageous as they are formally integrated in the educational community and are trusted by the students, however, the evidence also recommends having the support of specialized educators linked to the community health services [1].

In terms of content, only 55 % of the contents had a comprehensive perspective, whereas the rest were still focused on risks. According to the scientific evidence, the positive and responsible experience of adult sexuality will be easier if children and adolescents are trained to develop a positive image of sexuality. This should include aspects regarding themselves and their bodies (self-esteem), self-respect and respect for others, the differences, and diversities in the experience of sexuality, the expression of feelings and emotions, the identification of needs and limits, and the development of strategies to feel capable of making their own decisions. The gender perspective should be considered transversally, considering the type of relationships established between men and women, and the influence this has [22].

All available programs recommend a participatory methodology. Indeed, international recommendations on sexuality education advocate that the quality of sexuality education increases through the systematic participation of students, who should not be passive recipients, but rather active participants involved in the planning, organization, development, and evaluation of sexuality education [2].

Regarding the programs, only five complied with most of the international recommendations [1]. These projects incorporated specific training and didactic materials for teachers, two key elements to promote quality sexuality education [1,2]. In this sense, together with the subjects, they could be a model of good practice, considering, however, that the quality and effectiveness of these interventions were not analyzed. Only one program had several studies carried out at the regional level [23,24], including a study related to impact, with positive effects on knowledge, skills, and sexual behavior [25]. Other programs also had evaluations focused on the process and/or with limited samples [26–31].

In the remaining programs identified by this study, the presence of external and ad hoc interventions is striking, despite evidence of their ineffectiveness [1–4]. Likewise, there are programs that are solely based on the publication of didactic materials, an intervention which does not favor the real incorporation of sexuality education in schools [1–3,8], that requires institutional support and teacher training [1,2,4,13,14,20,21]. In terms of training deficiencies, we know that in the Spanish educational system only 14 % of schools have conducted teacher training on sexuality education in the last three years [32].

In terms of structural evaluation, comparing Spain with other European countries, it is striking to note the wide margin for improvement in our country in terms of sexuality education. According to the “Barometer on contraception”, carried out in 16 European countries in 2015, Spain is below the average, scoring 26 points out of 100 in sexuality education [33].

In addition, other data indicates the need for sexuality education for minors, as sexually transmitted infections have increased at an alarming rate in the last decade and Spain is one of the countries with the highest rates in the European Union [34]. Furthermore, in the young population, this increase [34,35], is accompanied by a decline in the use of condoms [36,37].

Studies published to date show that young people prefer to receive information on sexuality from teachers and health personnel, which reinforces the need and demand for sexuality education in schools [36–38].

4.1. Study limitations

This study had several limitations. Firstly, those inherent to the use of key informants, with possible biases in the responses [18,19]. Furthermore, this work did not evaluate the quality of the interventions, nor the fidelity to the proposed sessions, nor to the proposed methodology, since these were not the objectives of the study, which focused on the characteristics of the programs at a theoretical level.

5. Conclusions

Although sexuality education programs exist in practically all the Autonomous Communities, interventions are mainly carried out in Secondary Education, without considering the sexuality needs of Primary Education students.

The curricular subjects studied are elective, which limits their scope. In addition, the curricular subjects are scheduled to disappear based on recently approved legislations.

The programs that comply with published recommendations, together with the curricular subjects, can be a good starting point to advance in the design of a universal and mandatory intervention, according to international recommendations.

It is crucial that governments and educational institutions recognize the importance of comprehensive sexuality education as a fundamental right of young people. This means including CSE in curricula on a compulsory basis and ensuring that teachers are adequately trained to deliver it effectively. In addition, there is a need to promote a culture of openness and dialogue around sexual issues and ensure access to sexual and reproductive health services. Young people should have confidential access to contraception and STIs/HIV testing. This requires policies that facilitate the availability and accessibility of these services. In short, investing in comprehensive sexuality education benefits not only individual young people but also society as a whole by promoting health, gender equality, and disease prevention.

5.1. Relevance to clinical practice

The Spanish educational system has been progressing over time in its contents and structure, however, health education and, concretely, sexuality education is still not specifically present, beyond cross-cutting declarations. The current evidence argues that it should be a specific subject with specially trained professionals [1,2,20,21,39]. It is therefore necessary for national and regional education and health officials [1,2,40] to implement a curricular and compulsory subject focusing on sexual rights and gender, continued over time and with broad and specific contents, as seen in other countries with positive results [1,2,39,41–43].

In light of the situation presented and the available evidence, our recommendation is to introduce CSE as a subject in Spanish schools. This would involve modifying the current educational law to incorporate CSE at the Kindergarten, Primary, and Secondary levels. Additionally, we propose complementary actions, such as integrating sexual education content into children's regular health center visits and promoting safe, non-formal educational spaces within the community to address sexual education and other relevant topics for children and adolescents.

CRedit authorship contribution statement

José García-Vázquez: Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Laura Ruiz-Azcona:** Writing – review & editing, Visualization, Validation, Supervision, Resources, Methodology, Investigation, Formal analysis, Conceptualization. **Amada Pellico-López:** Writing – review & editing, Visualization, Validation, Supervision, Resources, Methodology, Formal analysis, Conceptualization. **María Paz-Zulueta:** Writing – review & editing, Visualization, Validation, Supervision, Project administration, Methodology, Funding acquisition, Formal analysis.

Ethics statement

The research protocol was approved by the Clinical Research Ethics Committee (internal code 2020.053). For this type of retrospective study, formal consent is not required.

Data availability statement

Data associated with the study has not been deposited into a publicly available repository. Data are available from the corresponding author on reasonable request.

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Declaration of competing interest

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.heliyon.2024.e39368>.

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