O MUNDO DA SAÚDE

ARTICLE ORIGINAL

DOI: 10.15343/0104-7809.202549e18052025I
ISSN: 1980-3990

School health in different countries

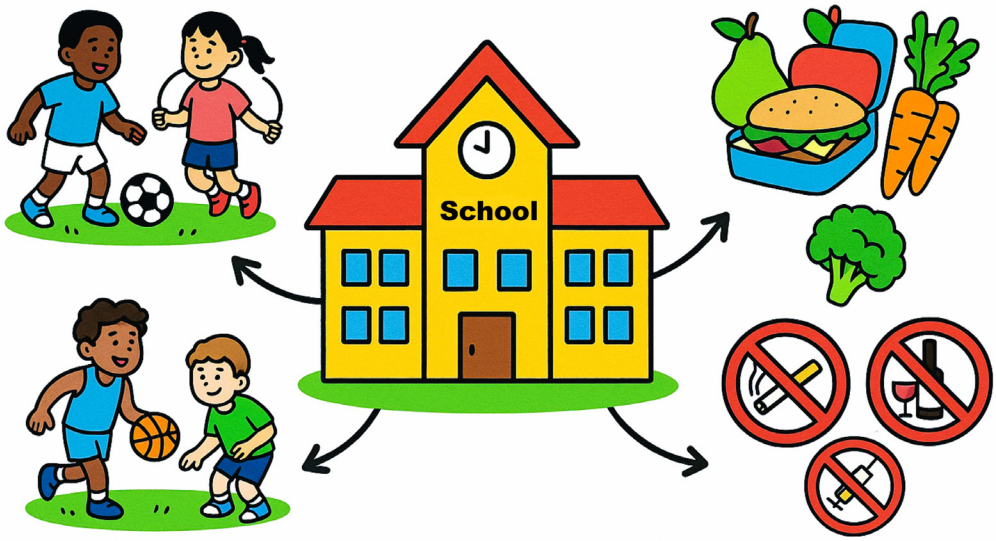
Vanessa Bordin[1,2] **Rosa Maria Rodrigues**[1] **Solange de Fátima Reis Conterno**[1] **Nádile Juliane Costa de Castro**[3]

[1]Programa de Pós-Graduação em Biociências e Saúde (PPG-BCS), Universidade Estadual do Oeste do Paraná – UNIOESTE. Cascavel/PR, Brasil.
[2]Centro Universitário Univel – UNIVEL. Cascavel/PR, Brasil.
[3]Programa de Pós-Graduação em Enfermagem (PPGENF), Universidade Federal do Pará – UFPA. Belém/PA, Brasil.
E-mail: vanessa.bordin93@gmail.com

Highlights

- *School health legislation in Brazil emphasizes comprehensiveness, intersectorality, and health promotion.*
- *School health actions in the surveyed countries focus primarily on the prevention of Noncommunicable Diseases (NCDs).*
- *School nurses are a priority in Spain.*
- *Uruguay has implemented healthy school kiosks.*
- *India stands out for incorporating yoga and meditation into school settings.*
- *Health literacy is essential for informed and healthy decision-making.*

Graphical Abstract



Abstract

Schools are recognized as key settings that articulate health and education actions aimed at fostering values, habits, and behaviors conducive to health in many countries. This study describes how school-oriented health actions are organized and implemented across different nations, with the aim of analyzing their school health activities based on the principles of comprehensiveness, intersectorality, and health promotion. An exploratory and descriptive study was conducted through documentary analysis of primary sources: official documents from eight countries, identified digitally, addressing the theme of school health, from july to september 2022. Data were organized in a matrix to systematize the analysis through the lens of comprehensiveness, intersectorality, and health promotion. The findings revealed that the countries established programmatic actions aimed at fostering lifelong habits among students and their families, particularly nutritional care; prevention of childhood obesity; promotion of physical activities, bodily practices, and leisure; prevention of alcohol, tobacco, crack, and other psychoactive substance use; mental health; sexual and reproductive rights; and prevention and control of Sexually Transmitted Infections. Convergence across countries was observed in school health actions, although variations were noted according to cultural and structural contexts. Comprehensiveness and intersectorality remain ongoing challenges, with preventive and assistential practices still prevailing. Nonetheless, schools have consolidated their role as strategic environments for health promotion and for strengthening public policies. The differences identified stem from the cultural and developmental characteristics of each country; however, intersectorality, comprehensiveness, and health promotion remain challenges within the experiences analyzed.

Keywords: School Health Services. Health Promotion. Comprehensiveness in Health. Intersectoral Collaboration. Health Personnel.

Associate Editor: Edison Barbieri
Mundo Saúde. 2025,49:e18052025
O Mundo da Saúde, São Paulo, SP, Brasil.
https://revistamundodasaude.emnuvens.com.br

Received: 01 september 2025.
Accepted: 18 november 2025.
Published: 12 december 2025.

INTRODUCTION

Health-related actions targeting school-aged children have been developed over the years, acquiring distinct contours throughout their evolution. The interest in, and early concerns regarding, such practices emerged in Europe during the 16th and 17th centuries, particularly in countries such as Germany, France, and England, which were undergoing periods of reorganization of practices and services, including health and education. The transformations that occurred in the health field in the 18th century further stimulated the development of care practices directed toward schoolchildren, grounded in three medical doctrines: Sanitarism, Medical Police, and Childcare (Puericulture)[1,2].

In the 20th century, health education aimed at fostering healthy and productive development by means of observation, examination, control, and discipline during childhood. Pedagogical practices were centered on individualistic actions, focused on changing behaviors and attitudes without considering the numerous living conditions and realities that shaped the lives of schoolchildren[3] a context that gradually shifted, prompting a rethinking of the school environment.

From this trajectory, school settings came to be understood as spaces in which health promotion and prevention actions are planned. Given their particular characteristics and extensive reach, schools play a fundamental role in shaping values and ways of living, aimed at strengthening individuals' abilities to make informed decisions and to create healthy environments that respect cultural, environmental, economic, and social diversity, thereby contributing to the consolidation of intersectoral policies that foster quality of life[4]. This underscores the importance of moving beyond isolated actions, toward the consideration of comprehensive care and health promotion, for which intersectorality is a necessary condition.

It is important to highlight that current health problems are largely attributable to health determinants related to lifestyles, represented primarily by Noncommunicable Diseases. Thus, strategies for improving health through health promotion within school contexts must be incorporated early in childhood and adolescence[3].

Children spend a substantial portion of their lives in school; therefore, it is essential to consider the influence that this institution exerts on them through the acquisition of habits and knowledge. Schools are environments in which students not only gain formal knowledge but also experience attitudes and behaviors relevant to health maintenance[4].

Based on this perspective, the following question arises: How is school health organized in other countries, considering the principles of comprehensiveness, intersectorality, and health promotion? Accordingly, this study aims to describe how school health actions are organized and implemented across different countries and to analyze school health activities based on the principles of comprehensiveness, intersectorality, and health promotion.

METHODOLOGY

This exploratory and descriptive study was conducted through documentary analysis of primary sources, fully available online, consisting of official documents produced by eight countries and Brazil addressing the theme of school health, from July to September 2022.

The countries selected for this study were those that made complete official documents available on governmental domains, ensuring the authenticity of the information analyzed. Selection was not restricted by language criteria, thereby allowing for a broad and comparative perspective of school health policies and actions across different contexts.

Once identified, the documents were translated and subjected to successive readings by two researchers to identify the school health actions implemented, highlighting their characteristics individually and in relation to the other countries analyzed.

Subsequently, the data were organized into a matrix to systematize the information, thereby guiding the analysis from the perspective of comprehensiveness, intersectorality, and health promotion. This systematization informed the discussion, which was developed in light of additional studies identified in the relevant literature.

The documentary study, which forms part of a broader field research project, was approved by the Research Ethics Committee under opinion number 5.072.975 and CAAE: 52268421.0.0000.0107.

RESULTS

To contextualize the identification and selection of the materials analyzed, a panoramic overview is presented below of the countries included in the study and the official documents retrieved from governmental portals, which supported the comparative analysis of school health policies.

Table 1 presents the countries included in the research, as well as the respective documents identified, which will later be analyzed and discussed in light of the scientific literature in the discussion section.

Table 1 - Documents available in full online for the development of the documentary analysis. Cascavel/PR, 2023.

Country	Number of Documents	Documents
Argentina	07	- Resolution No. 1.141/2019 – Ministry of Health and Social Development, 2019. - PROSANE Implementation Manual – Ministry of Health, 2020. - Health Status Report of Children and Adolescents – PROSANE – Ministry of Health, 2016. - Health Status Report of Children and Adolescents – PROSANE – Ministry of Health, 2015. - Resolution No. 1.511/2016 – Ministry of Health, 2016. - Resolution No. 11/2015 – Ministry of Health, 2015. - Agreement for the Development and Implementation of the National School Health Program – National Executive Branch, 2019.
Chile	02	- Technical Standard for the Comprehensive Health Supervision of Children Aged 0 to 9 Years in Primary Health Care 2021 – Chapter 1 – Ministry of Health, 2021. - Technical Standard for the Comprehensive Health Supervision of Children Aged 0 to 9 Years in Primary Health Care 2021 – Chapter 2 – Ministry of Health, 2021.
Ethiopia	01	- School Health Program Framework – Ministry of Health, 2017.
Spain	02	- Health Education Program in Schools and Institutes (PESEI), 2021. - Health Education in Schools: A Powerful Tool for Positive Changes in Society's Healthy Habits, 2014.
India	01	- Operational Guidelines for the School Health Program under Ayushman Bharat – Ministry of Health and Family Welfare, 2018.
Peru	03	- Ministerial Resolution No. 079/2020 – Ministry of Health, 2020. - Law No. 30.061/2013 – Legislative Branch, 2013. - Decree No. 010/2013 – Ministry of Health, 2013.
Portugal	01	- Directorate-General of Health Standard No. 15/2015, 2015.
Uruguay	02	- Law No. 19,140/2013 – National Register of Laws and Decrees, 2013 - Recommendations of Good Practices for the Implementation of Healthy Canteens and Kiosks in Educational Institutions – Ministry of Public Health, 2014.

Source: Data collected in the study, 2023.

In Brazil, educational health actions directed at schoolchildren have been present in official discourse since 1889. Currently, the topic remains highly relevant, as the importance of the school institution in matters related to health is indisputable.

The analysis of the information collected on school health in Brazil and in other countries demonstrates that programmatic health care actions for schoolchildren have grown across all nations since the beginning of the 21st century, as evidenced by initiatives implemented throughout the 2000s and 2010s in Brazil, Argentina, Spain, Uruguay, Chile, Portugal, Peru, Ethiopia, and India.

School health emerged as a strategic approach to preserving health during the school years; however, beyond this, it also aims to cultivate lifelong behaviors and to influence the habits of students' families. This is evident in the objectives of Brazil's *Programa Saúde na Escola* (PSE), which proposes articulating the actions of the public health system with those of the public Basic Education system in order to expand the reach and impact of actions directed at students and their families, optimizing the use of available spaces, equipment, and resources. Similar purposes are seen in India, where the goal is to promote healthy behaviors among children that will be retained throughout life; in Ethiopia, where the comprehensive School Health Program (SHP) seeks to improve students' health and well-being and empower them to become agents of health-related change in their communities; and in Spain, where actions also aim to influence other members of the educational community, families, and the broader social environment surrounding the educational center.

Across all programs analyzed, school health interventions emphasize disease prevention and the early detection of conditions such as nutritional deviations, hygiene-related issues, and growth and developmental problems factors that can immediately affect learning and daily life. These aims are reflected in the objectives of the programs exemplified below.

Promote health and a culture of peace, strengthening the prevention of health-related harms; strengthen the response to vulnerabilities, within the health field, that may compromise full school development[5].

> *Conduct a comprehensive assessment of the child's development and growth, considering age, family, and environment; identify protective and risk factors and behaviors for the child's physical, cognitive, psychomotor, affective, emotional, and social development within the school and family–community context; investigate early signs and symptoms of Noncommunicable Diseases (NCDs) or other health disorders [...]*[6].
>
> *Outline, develop, and reinforce integrated care policies, enabling an active response to the care needs of the school-aged population by promoting actions for health promotion, health protection, and disease prevention [...] Increase the knowledge and improve the health behaviors of children and adolescents aged 3 to 17 years through the promotion of healthy habits, risk prevention, and the provision of essential health education content that ensures self-awareness and the ability to take control of their present lives and future health [...]*[7].
>
> *Promote health, prevent disease within the educational community, and reduce the impact of health problems on students' academic performance*[8].
>
> *Timely detect risks and impairments related to the learning process through regular and periodic screening in educational institutions and early treatment in health facilities; strengthen the development of a health culture for care and self-care by promoting healthy practices and behaviors, considering regional health needs and cultural adaptation*[9].
>
> *Detect and treat diseases early in children and adolescents, including the identification of malnourished and anemic children and ensuring appropriate referrals to Primary Health Care (PHC) and hospitals*[10].

Some programs express comprehensiveness of care as the guiding principle of health actions directed at schoolchildren, articulating such care with other services beginning with primary care to ensure that students are assisted in their entirety, as evidenced in the documents analyzed.

> *Coordinate the actions of the public health network with those of the public Basic Education network in order to expand the reach and impact of actions directed at students and their families, optimizing the use of available spaces, equipment, and resources*[5].
>
> *Provide timely referrals according to each child's biopsychosocial health condition*[6].
>
> *Promote and strengthen health care for school-aged children and adolescents within the primary health care strategy, ensuring accessibility to the health system and establishing coordination with secondary and tertiary levels of care*[7].
>
> *Health and Well-being Ambassadors will also coordinate the referral of students requiring any form of support or treatment to Adolescent-Friendly Health Centers and Health and Well-being Clinics*[10].

Intersectorality is expressed across different countries, involving health professionals, teachers, families, and, in some cases, community forces and local governmental entities.

The professionals responsible for implementing program actions are, as a rule, health and education workers; however, their roles and responsibilities vary among countries. In Brazil, Argentina, Portugal, Peru, and Ethiopia, there is legal provision for health and education professionals to work collaboratively, although no school nurse is exclusively assigned to the school setting.

In Spain, school nurses are present within educational institutions, with teaching qualifications and experience in school health, acting as nursing professionals who promote health in that environment. In India, by contrast, the figure of the Health and Wellness Ambassador was created, assigned to two teachers preferably one man and one woman who are trained to carry out health-related activities.

Another noteworthy aspect among the programs is their funding. Depending on the country and the organizational structure of its health system, funding arrangements differ, as illustrated in Table 2.

Table 2 - Funding of school health care in different countries. Cascavel/PR, 2023.

Country	Type of Funding
Brazil	Public funding based on agreements and verified implementation of actions.
Chile	Funding composed of various sources—direct and indirect—from public and private subsystems, including general and specific taxes, budgetary resources, compulsory and voluntary contributions, and copayments.
Argentina	Public funding based on an adhesion agreement between jurisdictional authorities and the Ministry of Health.
Spain	There is no specific funding, as resources are concentrated within the schools themselves.
Portugal	Public funding through the Directorate-General of Health (Ministry of Health) and private funding through institutions with cooperation agreements.
Peru	Public funding and coverage through the Comprehensive Health Insurance.
Uruguay	Public funding through the Integrated Health Care Plan (PIAS), supported by employer and employee contributions.
India	Public funding through the Ministry of Health and Family Welfare as part of the Implementation Plan of the National Health Mission; in education, funding derives from pre-existing allocations for teacher training.
Ethiopia	Public funding by the Woreda administration (similar to districts) through revenue collection and support from the Ministries of Health and Education. Additionally, Woreda administrations must mobilize resources from the community, private sector, and Non-Governmental Organizations (NGOs) to strengthen program implementation.

Source: Data collected in the study, 2023.

Most programs cover the period from childhood through adolescence, with variations in focus depending on the country; in some cases, they also extend to families, teachers, and the broader community.

In Argentina, activities are prioritized in rural schools, multigrade schools, Indigenous communities, and schools selected based on socio-sanitary risk indicators, as well as among populations with limited access to health services, with the aim of reducing inequalities.

The actions developed with a focus on schoolchildren extend beyond this primary audience in countries such as Spain, Uruguay, Ethiopia, and Portugal, where interventions include parents, guardians, teachers, and caregivers. Notably, in Uruguay, food vendors and producers must also be reached by prevention and health promotion actions targeting schoolchildren.

The programmatic actions implemented to meet the health needs of schoolchildren can be seen in Table 3, as well as the countries that implement them. It can be inferred that prevention and diagnostic actions predominate (1, 2, 3, 4, 6, 8, 9, 14, 15, 16, and 22 to 29), although health promotion activities are also observed, as exemplified in actions 5, 7, 10, 11, 12, and 17 to 21. Spain is the country that develops all health promotion activities, except for sanitary pad distribution, which is exclusive to India. Together with Uruguay, India is among the countries after Spain that most frequently implement activities aligned with health promotion.

Table 3 - Actions implemented by countries regarding school health in different countries. Cascavel/PR, 2023.

N	Actions	Countries
1	Promotion of healthy eating, prevention of childhood obesity, dietary habits, nutritional assessment through Body Mass Index (BMI) and anthropometry, nutrition, and school nutrition services.	Brazil, Chile, Spain, Portugal, Peru, Uruguay, India, Argentina, and Ethiopia.
2	Promotion of hearing health, hearing assessment, and identification of students with possible signs of impairment.	Brazil and Argentina.
3	Promotion of ocular health, visual acuity assessment and screening, identification of students with possible signs of impairment, and eye-care practices.	Brazil, Argentina, Peru, and India.
4	Actions to combat the Aedes aegypti mosquito and prevention of diseases under elimination or endemic conditions, such as malaria, tuberculosis, worm infestations, diarrhea, vaccine-preventable diseases, and management of common infections, infestations, and disorders.	Brazil, India, and Ethiopia.
5	Promotion of bodily practices, physical activity, leisure at school, sedentary lifestyle reduction, recreational activities, sports, leisure, and rest.	Brazil, Chile, Spain, Peru, India, Uruguay, and Portugal.

to be continued...

...continuation - Table 3.

N	Actions	Countries
6	Prevention of alcohol, tobacco, crack, and other psychoactive substance use, as well as prevention of non-substance-related addictive behaviors; prevention and support for mental, neurological, and substance-use disorders; mental health and prevention of mental illness; socioemotional skills development.	Brazil, Chile, Uruguay, Portugal, Peru, India, Ethiopia, and Spain.
7	Promotion of a culture of peace, citizenship, and human rights; violence and aggression prevention; emergency and accident prevention; safety measures; preventive education on road safety/traffic; first aid; personal safety; unintentional injuries.	Brazil, Chile, Uruguay, Spain, Peru, and India.
8	Promotion and assessment of oral/dental hygiene, topical fluoride application; dental and stomatological examination.	Brazil, Chile, Uruguay, Argentina, Peru, and India.
9	Vaccination and immunization services: vaccination record updates and administration of pending doses; screening of vaccination schedules (boosters); age-appropriate immunization.	Brazil, Argentina, Peru, India, and Ethiopia.
10	Sexual and reproductive rights, prevention and control of STIs; affective, sexual, and reproductive education.	Brazil, Spain, Uruguay, Portugal, Peru, India, and Ethiopia.
11	Sleep patterns, rest and hygiene (personal and environmental hygiene); bathroom-use habits.	Chile, Spain, India, Ethiopia, and Portugal.
12	Provision of sanitary pads; provision of water, sanitation, and hygiene.	Ethiopia.
13	Comprehensive clinical examination; general medical history; personal and family health history; physiological knowledge of the human body.	Chile, Peru, Argentina, and Spain.
14	Patterns of bowel and urinary elimination.	Chile.
15	Blood Pressure (BP) assessment.	Argentina.
16	Assessment of speech, language, and communication.	Argentina.
17	Environmental health and a healthy global environment; promotion of healthy habits and behaviors.	Spain, Uruguay, and Peru.
18	Life skills: emotional, social, and cognitive competencies.	Spain.
19	Gender equality education.	Spain.
20	Prevention and healthy use of new technologies; internet safety and media literacy.	Spain and India.
21	Self-awareness and decision-making regarding one's own health; human relationships, respect, and conflict resolution; applied bioethics; healthy relationships; social and behavior-change communication; life-skills development.	Spain, Uruguay, Peru, and Ethiopia.
22	Postural education.	Portugal.
23	Detection of respiratory symptoms (targeted areas).	Peru.
24	Hemoglobin testing for anemia detection.	Peru and India.
25	Tuberculin skin test – PPD (target areas).	Peru.
26	Puberty and related changes.	India.
27	Bullying prevention.	India.
28	Meditation and yoga.	India.
29	Provision of Ferrous Folic Acid tablets and Albendazole.	India.

Source: Data collected in the study, 2023.

School health programs emerged in response to imminent social needs affecting this population and were structured as State-level initiatives, implemented either through the public network or jointly with the private sector. An exception is the school health program in Spain, which was created based on research that produced a health diagnosis of schoolchildren and involved education professionals from both public and private schools, in addition to extensive investigations and exhaustive literature reviews, with the objective of responding to health needs within schools. Following this process, the *Programa de Educación para la Salud en la Escuela y el Instituto* (PESEI) was established, resulting from the merger of two previous programs: the *Programa de Educación para la Salud Escolar* (PESE) and the *Programa de Educación para la Salud en la Enseñanza Secundaria* (PESI)[11].

In Portugal and Spain, health literacy stands out as a central theme within school health initiatives, as illustrated in the excerpts below:

> *Health literacy refers to a set of cognitive and social skills that determine individuals' motivation and ability to access, understand, and use information in ways that promote and maintain good health. It may be defined as the learner's awareness and active engagement in*

developing the capacities needed to comprehend, manage, and invest in actions conducive to health promotion, with its scope extending also to disease prevention and cure[8].

[...] preparing students so that, in adulthood, they achieve an optimal level of health literacy that enables them to recognize and adopt healthy habits across different stages of life, prevent diseases and accidents, and make informed decisions regarding their own health[11].

Another particular feature identified is the presence of healthy school cafeterias and kiosks within Uruguay's school health program, which encourage adequate nutrition and involve the entire school community[12]. These initiatives target students, teachers, and non-teaching school staff, as well as families, thereby promoting healthy eating practices.

Additionally, vendors and producers who participate in the production and commercialization chain of foods supplied in these settings and who adhere to good practices contribute to the development of a healthy public policy and benefit from incentives for the production and sale of healthy foods. This configuration exemplifies intersectorality and health promotion by influencing the health-production process through healthy eating.

DISCUSSION

Schools have become important settings for the intersection of health and education, encompassing opportunities for health promotion and disease prevention, as well as clinical diagnosis strategies, screening procedures, identification, and referral to specialized or primary health services, and health education activities[13].

Health promotion within schools requires that all members of the school community commit to collaborating and acting collectively to sustain learning behaviors and student well-being in all aspects of school life, transcending the classroom[14]. A health-promoting school is continuously reinforcing its capacity to assess and improve the health of students, teachers, family members, and the wider community[15], thereby providing a healthy environment for coexistence, learning, and work.

Based on the documents reviewed, it can be inferred that collective assessments (clinical evaluations and/or screening actions) were reported by all countries, including those related to food and nutrition; prevention of drug use and abuse; sexual and reproductive rights and STI control; and physical activity.

The identification of programmatic actions for school health care in different countries demonstrated the foundational role of school health, with a focus on improving students' health and well-being and empowering them to become agents of change for their own health, as well as that of their families and communities.

In alignment with the objectives proposed by school health actions, these initiatives are complementary, as they operate in promotion, prevention, articulation between health and education networks, and engagement with other sectors. They also strengthen policies and strategies that ensure commitment to student health through early identification of health issues and timely referrals across collaboration networks.

Among the various experiences presented in the documents regarding the organization of school health actions, it is evident that comprehensive care is emphasized by several countries, with strategies focused on broad assessments of children and adolescents.

Achieving comprehensiveness occurs through the establishment of conditions that support the holistic development of students, strengthening their ability to confront vulnerabilities that may compromise full school development, as well as the promotion of citizenship and human rights.

Intersectorality, in turn, is characterized by the mobilization of different sectors to carry out joint interventions aimed at improving living and health conditions[16]. Thus, school health actions express components of health promotion, comprehensiveness, and intersectorality, while also presenting specific characteristics shaped by the realities and needs of each country. Nevertheless, there remains a predominance of care-oriented actions focused on prevention and diagnosis among schoolchildren.

In Spain, the actions directed at school health emerged from the merger of two previous programs and have the overarching goal of increasing knowledge and improving the health behaviors of children and adolescents aged 3 to 17 through the promotion of healthy habits[11]. School health management is carried out by a professional nurse, present in private schools and selected public schools, whose role is to guide the educational community on all health-related aspects during school hours.

Within the field of nursing and school health,

the school nurse is regarded as an expert and specialist in health care in the school environment—primarily directed at students but also serving other members of the educational community (teachers, non-teaching staff, and parents)[17]. Furthermore, these professionals engage with issues of funding, administrative demands, and the need for evidence-based research to support and strengthen their position within school settings[18].

To this end, school nurses encourage students' positive responsibility for normal development, promoting health and safety, addressing potential and current health problems, performing case management, and actively collaborating with the entire school community to build students' adaptive capacity within the family context, their self-management, support, and learning[17].

There are various international definitions of the school nurse, and all emphasize the importance of this professional in terms of health care, prevention, promotion, and education, contributing to improved health among the school population and serving as an ally in acquiring healthy habits from childhood onward[11].

A study conducted in Spain concluded that educational policies related to health education required the integration of the school nurse into the educational setting for a school to be considered health-promoting. This professional represents not only a source of specialized knowledge but also a commitment to the quality of health-promoting schools[19].

Within the Spanish experience, the subject Health Education in Educational Centers provides school-aged populations with the knowledge, abilities, and competencies necessary for health promotion, disease prevention, and general understanding of health and the health system, preparing them to reach adulthood with a level of health literacy that enables them to recognize and apply healthy habits[11].

The promotion of health literacy has, in recent years, been identified as a pathway toward improving health care and is increasingly emphasized as a concern in the formulation of health policies[11], being similarly cited in school health actions in Portugal[8].

Aligned with the Spanish school health actions, Portugal focuses on improving the health conditions of the educational community, encompassing interventions in the health of children and youth, special health needs, and the health of teaching and non-teaching staff[8].

Health actions directed at students highlight the importance of coordination between the education and health sectors, as well as collaboration with families, identifying the special needs of each child and providing early and continuous support as health-related issues emerge[8].

Intersectoral joint training between health and education, together with health promotion and health education, stands out due to project-based working methodologies, guiding principles, and frameworks on several health topics[12].

Regarding school health in Uruguay, special attention is given to the promotion of healthy eating and physical activity. Data show that in Uruguay, 22% of schoolchildren are overweight and 17% are obese; among adults, 64% are overweight or obese, 36.6% have hypertension, and 7.6% have Diabetes *mellitus*[12].

Thus, the most significant factors contributing to weight gain and obesity include insufficient physical activity, regular consumption of sugary beverages, and high intake of products with low nutritional value and high levels of sugar, fat, and salt[12]. Given the high prevalence of overweight and obesity, the promotion and encouragement of healthy eating are suggested as strategies that can contribute to their control and reduction. Several studies demonstrate that foods high in fats, salt, and sugars are among the most frequently sold in school cafeterias[20,21].

Accordingly, one of the pathways to ensuring the availability of healthy foods and beverages in educational centers is the implementation of healthy cafeterias or kiosks[12], intended to distribute and/or sell foods and beverages that promote healthy eating habits, including a wider variety of healthy items for the entire school community.

The school environment serves as a setting for health, a place where intervention strategies can be developed for establishing healthy lifestyle habits. It can provide students with nutritionally balanced snacks and regular physical activity, promoting the acquisition of knowledge, attitudes, behaviors, skills, and experiences that form the foundation for becoming healthy, educated, and empowered citizens[22].

In Peru, school health actions are similar to those implemented in Uruguay regarding healthy eating and physical activity, particularly through the adoption of healthy kiosks, as well as improvements in recreational and sports spaces.

The Peruvian school health plan, in addition to detecting diseases among schoolchildren through comprehensive health assessments and risk identification, includes actions such as identifying stu-

dents with anemia (hemoglobin testing), tuberculosis (tuberculin skin test), and respiratory illnesses in targeted areas[23,24].

Furthermore, schoolchildren enrolled in the National School Feeding Program are incorporated into the Comprehensive Health Insurance[23]. In 2018, 43.5% of Peruvian children under five years of age presented anemia, and the prevalence of overweight and obesity among school-aged children and adolescents was 32.3% and 23.9%, respectively[24].

A school-aged child with anemia may experience delayed psychomotor and cognitive development, concentration difficulties, increased morbidity from infectious diseases, fatigue, reduced work capacity, and decreased productivity associated with stunted growth[25].

At the global reporting level for tuberculosis cases in 2017, within the Americas region, Peru ranked third among the countries with the highest incidence rates, surpassed only by Haiti and Bolivia[26].

Studies indicate that diagnosing tuberculosis in children under five years of age presents substantial challenges, particularly in obtaining sputum samples since young children are unable to expectorate as well as due to the nonspecific nature of early clinical manifestations, which may be confused with other infectious conditions or even malnutrition. In many cases, suspicion arises only in pneumonia cases that do not improve with antibiotic therapy[27,28]. Therefore, evaluation and follow-up of these students are essential, both for diagnosis and for subsequent treatment when necessary.

In Chile, school health care is conducted considering the child's developmental stage, family, and environment, identifying protective or risk behaviors and assessing growth and development comprehensively, along with the child's biopsychosocial condition[6].

Within the Chilean health context, assessments of schoolchildren are performed either at the health center or at the school itself, with the presence of parents or caregivers. In the absence of a responsible adult, an informed consent form specifying the evaluations to be performed and safeguarding the child's privacy must be signed in advance.

In Ethiopia, in 2016, 38.4% of children were classified as stunted and 23.6% as wasted. Another relevant indicator is that each year children collectively lose 272 million school days due to diarrhea, and one in three school-aged children in the developing world is infested with intestinal worms[29].

Children with malnutrition are vulnerable to clinical complications, such as impairments in cognitive development[30], heightened susceptibility to infections, and increased risk of chronic diseases[31].

Across the African continent, the prevalence of stunting among children under 59 months of age decreased from 42.3% in 1990 to 38% in 2000 and 30% in 2018[32]. However, the absolute number of affected children increased from 50.4 million in 2000 to 58.5 million in 2016, a situation presumably related to precarious socioeconomic conditions[33].

Most primary schools in Ethiopia have sanitation facilities, with 86.0% having some form of toilet or latrine (improved sanitation). Due to insufficient sanitation provision, approximately 49.0% of all schools are considered open-defecation-free. Regarding hand hygiene, about one-fifth of primary schools (21.0%) report having handwashing facilities, and only 5.0% have soap available[29].

Analyzing the data above, it becomes evident that despite the presence of actions related to sanitation, hygiene, and safe drinking water for schoolchildren, the country still faces numerous structural, financial, and human resource challenges; not all schools have access to a health professional, resulting in multiple health-related problems among children and adolescents[29].

In India, the most noteworthy actions implemented for schoolchildren include meditation and yoga practices, in addition to the presence of trained teachers known as Health and Wellness Ambassadors assigned to each school.

Operationalization occurs through the training of two teachers preferably one man and one woman who are responsible for delivering health promotion and disease prevention activities for one hour per week. This approach aims to improve health practices, as students act as active agents of health and well-being within society. The Health and Wellness Ambassadors are supported by two students from each class who assist in facilitating initiatives and activities within the school health component, referred to as Health and Wellness Messengers[10].

It is important to highlight that yoga and meditation are practices associated with Hinduism and other religions, consisting of techniques such as mental concentration, breath control, ritual worship, chanting, and other activities[34].

In Argentina, the most prevalent health problems identified among children and adolescents are overweight and obesity, affecting 37.1% of the population aged 5 to 13 years[7] findings similar to those of other countries, where the promotion of healthy eating and physical activity in schools is crucial.

CONCLUSION

The comparison among contexts revealed that school health actions reflect the historical, socioeconomic, and structural specificities of each nation, as well as their health care models.

In Brazil, although school health legislation incorporates these principles, the *Programa Saúde na Escola* still lacks practices that effectively materialize health promotion.

In high-income countries, emphasis is placed on health literacy and the prevention of chronic diseases and mental disorders, whereas in low- and middle-income and developing countries, actions remain focused on controlling communicable diseases and addressing nutritional deficiencies.

Across all contexts, healthy eating and the prevention of psychoactive substance use emerge as recurrent concerns, aligning with World Health Organization guidelines. However, social inequalities and inadequate sanitation conditions continue to hinder the implementation of comprehensiveness and intersectorality, thereby limiting the full realization of health promotion within school environments.

CRediT author statement

Conceptualization: Bordin, V; Rodrigues, RM. Methodology: Bordin, V; Rodrigues, RM. Validation: Bordin, V; Rodrigues, RM. Statistical Analysis: Bordin, V; Rodrigues, RM. Formal Analysis: Bordin, V; Rodrigues, RM; Conterno, SFR; Castro, NJC. Investigation: Bordin, V; Rodrigues, RM. Resources: Bordin, V; Rodrigues, RM. Writing – Original Draft Preparation: Bordin, V; Rodrigues, RM; Conterno, SFR; Castro, NJC. Writing – Review & Editing: Bordin, V; Rodrigues, RM; Conterno, SFR; Castro, NJC. Visualization: Bordin, V; Rodrigues, RM; Conterno, SFR; Castro, NJC. Supervision: Bordin, V; Rodrigues, RM. Project Administration: Bordin, V; Rodrigues, RM.

All authors have read and agreed to the published version of the manuscript.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the workreported in this paper.

REFERENCES

1. Ferriani MGC. A inserção do Enfermeiro na Saúde Escolar: análise crítica de uma experiência. Rev. Bras. Enferm. [revista da Internet] 1992, janeiro-março. [acessado em 12 de janeiro de 2025]; 45(1): 91. Disponível em: https://www.scielo.br/j/reben/a/5WSH7jdMbtW8tKBvzXgdcGd/?format=pdf&lang=pt.
2. Lima GZ. Saúde Escolar e Educação. Rev. Fac. Educ. [revista da Internet] 1985, janeiro-dezembro. [acessado em 05 de janeiro de 2025]; 11(1/2):313-3.15. Disponível em: http://educa.fcc.org.br/pdf/rfe/v11n1-2/v11n1-2a18.pdf.
3 Bröder J et al. Child and youth health literacy: A conceptual analysis and proposed target-group-centred definition. International Journal of Environmental Research and Public Health. [revista da Internet] 2019. [acessado em 08 novembro de 2025]; 16(18):1-17. DOI: https://doi.org/10.3390/ijerph16183417.
4. Nunes A, Quezada P. O papel da escola na educação para a saúde. Rev. Expr. Catól. Saúde., [revista da Internet] 2025. [acessado em 08 de novembro de 2025]; 10(1). Disponível em: https://publicacoes.unicatolicaquixada.edu.br/index.php/recs/article/view/1508/1392.
5. Brasil. Decreto Presidencial n. 6.286, de 5 de dezembro de 2007. Institui o Programa Saúde na Escola – PSE e dá outras providências. Diário Oficial da União. 06 de dezembro de 2007. Disponível em: https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2007/decreto/d6286.htm.
6. Chile. Norma técnica para la supervisión de salud integral de niños y niñas de 0 a 9 años en la Atención Primaria de Salud. Capítulo 1: Antecedentes sociales y de salud. 2021. Disponível em: https://diprece.minsal.cl/wp-content/uploads/2022/03/Norma-Tecnica-para-la-Supervision-de-Salud-de-Ninos-y-Ninas-de-0-a-9-anos-en-la-APS-V2.pdf.
7. Argentina. Situación de salud de niños, niñas y adolescentes en la Argentina. Secretaria de Salud Comunitaria. Programa Nacional de Salud Escolar (PROSANE). 2015. Disponível em: https://www.argentina.gob.ar/sites/default/files/bancos/2018-10/0000000928cnt-situacion-salud-argentina-agosto-_2015.pdf.
8. Portugal. Norma da Direção-Geral da Saúde. n. 15 de 12 agosto de 2015. Programa Nacional de Saúde Escolar 2015. 2015. Disponível em: https://observatorio-lisboa.eapn.pt/ficheiro/Programa-Nacional-de-Sa%C3%BAde-Escolar-2015.pdf.
9. Lima. Resolução Ministerial n. 079 de 04 de março de 2020. "Plan de Salud Escolar 2020-2021", el mismo que forma parte integrante de la presente Resolución Ministerial. 2020a. Disponível em: https://www.gob.pe/institucion/minsa/normas-legales/455293-079-2020-minsa.
10. Índia. Operational Guidelines on School Health Programme under Ayushman Bharat Health and Wellness Ambassadors partnering to build a stronger future. 2018. Disponível em: https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/AH/guidelines/Operational_guidelines_on_School_Health_Programme_under_Ayushman_Bharat.pdf.
11. Gràcia SP et al. Programa de Educación para la Salud em las Escuelas e Institutos (PESEI). International Association of School Nursers & Health Promotion (ISNA). 2021. Disponível em: https://www.consejogeneralenfermeria.org/images/pdfs/observatorio-nacional/PESEI_2021-Actualizado.pdf.
12. Uruguai. Estrategia nacional de promoción de la salud. Plan nacional de promoción de la salud y prevención y control de las enfermedades crónicas no trasmisibles plan nacional de escuelas promotoras de salud. Promoción de la alimentación saludable en niños, niñas y adolescentes. Recomendaciones de buenas prácticas para la implementación de cantinas y quioscos saludables en las instituciones educativas. 2014. Disponível em: https://www.iccp-portal.org/sites/default/files/plans/El%20Salvador%20-%20Plan%20estrategico%202010%E2%80%902014%20de%20la%20promocion%20de%20la%20salud%20-%20prevencion%20y%20control%20de%20las%20enfermedades%20cronicas%20no%20transmisibles.pdf#:~:text=PLAN%20ESTRAT%C3%89GICO%202010%2D%202014%20PROGRAMA%20NACIONAL%20DE,CONTROL%20DE%20LAS%20ENFERMEDADES%20CR%C3%93NICAS%20NO%20TRANSMISIBLES.
13. Casemiro JP, Fonseca ABC, Secco FVM. Promover saúde na escola: reflexões a partir de uma revisão sobre saúde na escola na América Latina. Rev.

Ciências saúde coletiva. [revista da Internet] 2014. [acessado em 22 de janeiro de 2025]; 19(3):829-840, 2014. Disponível em: https://www.scielo.br/j/csc/a/HKhpbcMjGmyjkhsKgwcx83F/?format=pdf&lang=pt.
14. Griebler U et al. Effects of student participation in school health promotion: a systematic review. Health Promot Int. [revista da Internet] 2017. [acessado em 26 de janeiro de 2025]; 32(2):195-206, Disponível em: https://pubmed.ncbi.nlm.nih.gov/24395957/.
15. Silva MRI et al. Processo de Acreditação das Escolas Promotoras de Saúde em âmbito mundial: revisão sistemática. Ciência & Saúde Coletiva. [revista da Internet] 2019. [acessado em 24 de janeiro de 2025]; 24(2): 475-486. Disponível em: https://www.scielo.br/j/csc/a/3cNYjLpv4TJ63T979rkzVmC/?format=pdf&lang=pt.
16. Brasil. O SUS no seu município: garantindo saúde para todos. 2004. Disponível em: https://bvsms.saude.gov.br/bvs/publicacoes/cartilha_sus.pdf.
17. González E. O enfermeiro no ambiente escolar: importância na prevenção e promoção da saúde. Enferm Comun. [revista da Internet] 2012. [acessado em 28 de janeiro de 2025]; 8(1). Disponível em: http://www.index-f.com/comunitaria/v8n1/ec7813.php
18. Alencar NES. A práxis da enfermagem escolar no contexto da pandemia pelo novo coronavírus. Rev. Interd., [revista da Internet] 2020. [acessado em 16 de janeiro de 2025]; 13(1):1-7. Disponível em: https://dialnet.unirioja.es/servlet/articulo?codigo=7981232.
19. Monsalve L. Políticas educativas em educação para a saúde na União Europeia: estudo comparativo. Faculdade de Filosofia e Ciências da Educação. 2013.
20. Lobstein T, Baur L, Uauy R. Obesity in children and young people: a crisis in public health. Obesity reviews. [revista da Internet] 2004. [acessado em 28 de janeiro de 2025]; 5(suppl 1):4-104, Disponível em: https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1467-789X.2004.00133.x.
21. Schmitz BAS et al. Overweight and obesity related factors in schoolchildren in Santa Catarina State, Brazil. Arch Latinoam Nutr. [revista da Internet] 2010, dezembro. [acessado em 21 de janeiro de 2025]; 60(4):332-9. Disponível em: https://pubmed.ncbi.nlm.nih.gov/21866682/.
22. OMS. Organização Mundial de Saúde; OPAS. Organização Pan Americana de Saúde. Transformar cada escola em uma escola promotora de saúde. Guia de implementação. 2022. Disponível em: https://iris.paho.org/bitstream/handle/10665.2/55812/9789275725306_por.pdf?sequence=1&isAllowed=y.
23. Lima. Lei n. 30.061 de 06 de julho de 2013. Ley que declara de prioritário interés nacional la atención integral de la salud de los estudiantes de educación básica regular y especial de las instituciones educativas públicas del ámbito del programa nacional de alimentación escolar qali warma y los incorpora como asegurados del Seguro Integral de Salud (SIS). 2013. Disponível em: https://www.riadis.org/wp-content/uploads/2020/10/Ley-30061.pdf.
24. Lima. Resolução Ministerial Lei nº 30.061/2013 – Poder Legislativo, 2013. Disponível em: https://www.leyes.congreso.gob.pe/Documentos/2016_2021/ADLP/Normas_Legales/30961-LEY.pdf.
25. Benton D. Micronutrient status, cognition and behavioral problems in childhood. Eur J Nutr., [revista da Internet] 2008. [acessado em 29 de janeiro de 2025]; 47(suppl 3)p; 38-50. Disponível em: https://pubmed.ncbi.nlm.nih.gov/18683028/.
26. Peru. Resolução Ministerial n. 247 de 22 de março de 2018. Plan de Intervención de Prevención y Control de Tuberculosis en Lima Metropolitana y Regiones priorizadas de Callao, Ica, La Libertad y Loreto, 2018 - 2020. 2018. Disponível em: https://cdn.www.gob.pe/uploads/document/file/187917/187412_R.M_247-2018-MINSA.PDF20180823-24725-behrrf.PDF?v=1672777107.
27. Reuter A, Hughes J, Furin J. Challenges and controversies in childhood tuberculosis. Lancet, [revista da Internet] 2019, setembro. [acessado em 25 de janeiro de 2025]; 394(10202):967-978. Disponível em: https://pubmed.ncbi.nlm.nih.gov/31526740/.
28. Chiappini E et al. Recommendations for the diagnosis of pediatric tuberculosis. Eur J Clin Microbiol Infect Dis. [revista da Internet] 2016. [acessado em 26 de janeiro de 2025]; 35(1):1-18. Disponível em: https://pubmed.ncbi.nlm.nih.gov/26476550/.
29. Etiópia. School Health Program Framework. Be Healthy to Learn and Learn to be Healthy. 2017. Disponível em: https://platform.who.int/docs/default-source/mca-documents/policy-documents/plan-strategy/ETH-AD-17-01-PLAN-STRATEGY-2017-eng-School-Health-Program-Framework.pdf.
30. Perignon M et al. Stunting, poor iron status and parasite infection are significant risk factors for lower cognitive performance in Cambodian school aged children. PLoS One. [revista da Internet] 2014. [acessado em 26 de janeiro de 2025]; 9(11):e112605, Disponível em: https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0112605&type=printable.
31. Rodriguez Martinez CE, Rodriguez DA, Nino G. Respiratory syncytial virus, adenoviruses, and mixed acute lower respiratory infections in children in a developing country. J Med Virol,. [revista da Internet] 2015. [acessado em 23 de janeiro de 2025]; 87(5):774-81. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5529163/pdf/nihms882417.pdf.
32. UNICEF. Fundo das Nações Unidas para a Infância. Levels and trend in child malnutrition: key findings of the 2019. Geneva, 2019. Disponível em: https://www.unicef.org/media/60626/file/Joint-malnutrition-estimates-2019.pdf.
33. OMS. Organização Mundial de Saúde. Regional Office for Africa. Nutrition in the WHO African Regional. Regional Office for Africa. 2017. Disponível em: https://www.afro.who.int/sites/default/files/2017-11/Nutrition%20in%20the%20WHO%20African%20Region%202017_0.pdf.
34. Danucalov MAD, Simões RS. Neurofisiologia da Meditação. 1ª ed. São Paulo: Phorte, 2009.

How to cite this article: Bordin, V., Rodrigues, R.M., Conterno, S.F.R., Castro, N.J.C. (2025). School health in different countries. *O Mundo Da Saúde*, 49. https://doi.org/10.15343/0104-7809.202549e18052025I. Mundo Saúde. 2025,49:e18052025.