# A theoretical framework on intersectoral practice in School Health Promotion

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> Abstract This study focuses on the theoretical references that have influenced Brazilian school health programs based on the Rio de Janeiro experience. It draws on Brazilian literature from the mid-20th century to date and international literature on the assessment of health promotion. Proposals for the domestication of student behavior using hygienist principles are analyzed, as well as some engaged in the creation of a specific health course in the school syllabus and other with a clinical and healthcare perspective. Covering a more recent period, the study analyzes how health and educational systems resumed their collaboration from a health promotion-linked model. The paper demonstrates the importance of different theoretical references for the understanding of actions and strategies summarized in a framework. It also explains the influence of historical contexts in which dialogue and definition of actions occur between education and health in the challenging coordination of practice and knowledge involving the two sectors.

> **Key words** Health promotion, Health education, Public health practice, School health promotion, Intersectorality

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#### Introduction

Health issues can be discussed in the daily lives of different social settings and in different ways. Melo¹ states that, as social practice, education and health have always been coordinated. In public elementary schools, health-related issues emerge in classrooms through different representations from teachers, students and family members expressing their concerns about better health and quality of life. On the other hand, the only alternative to education-related issues not discussed or resolved by schools seem to be health services², and they are expected to be solved from the medical standpoint.

Public schools are historically important venues for health practice and experience present in the mutual relations of individuals living in this scenario. The determinants of health and disease conditions can be debated and analyzed at school. School is an institution defined by its teaching role, but it is also the place where health appears as a recurring subject of learning. However, discussing school health occurred mainly around the issue control and prevention of situations of illness and risk and harm to health through epidemiological and health surveillance and clinical and therapeutic care. The course of health education has sustained a hygienist and preventative logic with normative components and pre-defined content of what should be done and discussed in school health<sup>3-5</sup>.

In the 1950s, pioneer critic to the hygienist logic Hortênsia Hollanda started the opening of health education valuing community participation<sup>6</sup> by proposing to build with the community the knowledge for life based on Paulo Freire<sup>6</sup>.

Recently, the redefinition of the debate on school health emerged from health promotion<sup>7-9</sup>. Rather than exclusive emphasis on biological factors and features, health is understood as a product of everyday life and encompasses sociocultural aspects of living conditions. This discussion gains strength and recognition in Brazil<sup>10,11</sup> and reaffirms schools as an important setting for the construction of more favorable quality life scenarios.

The diversity of strategies for health integration as a school matter has been historically recognized: on the one hand, models aimed at taming student conduct and behavior<sup>4</sup>, and on the other, educational practices related to the popular education that encourages individual critical and autonomous capacity and control over own health and living conditions in line with health promotion principles<sup>12</sup>.

Based on theoretical frameworks of health promotion, we sought to understand the different concepts and interfaces between health and education embodied by school health policies and practices in various international, national and local contexts in the last 80 years. The organization, structure and development of these policies and practices are different ideas on health, education and the relationship between these two areas of knowledge<sup>3-5</sup>.

#### Methodological strategies

The theoretical and methodological approach of the study was based on the program evaluation approach13,14, in particular health promotion<sup>15</sup>. The recovery and identification of official documents was carried out, mainly of school health-related publications, selected from the 1920s to 2009, such as reports, articles, records, books and legislation relating to so-called school health programs during this period, reports and activity logs of Rio de Janeiro's municipal school health program, the Brazilian Society of Pediatrics, the Brazilian School Health Association, PAHO Health-Promoting Schools Initiative<sup>16</sup>, the National Health Promotion Policy<sup>17</sup> and the School Health Program of the Ministry of Health and Ministry of Education, the national reference for school health<sup>4,5,18</sup>. Basis of this study, Rio de Janeiro, as the federal capital of the country, in a way, captained the national debate and has been the locus of the first public health services related to elementary schools<sup>19</sup>.

The review was based on guidelines and theoretical explanations that inspired the definition of policies and programs in the city of Rio de Janeiro and in the course of coordinating proposals between health and education, which assumed intersectoral practice. We sought to identify the theoretical frameworks used in different historical and political contexts, highlighting the health concepts<sup>11,14</sup> that built on and which, in turn, enabled the analysis of health school strategies they used. Thus, it was possible to outline similarities and contrasts between them and identify different models of school health at the national level.

# The Four Stages of the Brazilian Health School Development

#### 1 – The Sanitary and Discipline Model

The first Brazilian milestone of school health dates back to the early twentieth century in the logic of urban space modernization and sanitation as a fundamental condition for fighting epidemics by Pereira Passos<sup>20</sup>, Mayor of Rio de Janeiro. Social issues such as urbanization, poor conditions of transport, sanitation and hygiene in unsanitary places and dwellings favored the emergence and spread of diseases such as smallpox, yellow fever, tuberculosis and cholera. Of the proposed health care steps, worth mentioning is the establishment of the Student Medical Care, the first official health system linked to the Education Secretariat of the Federal District. The first public health service linked to Education was established in 1910, namely, the School Health Inspection Service of Rio de Janeiro<sup>19</sup>. Zanetta<sup>21</sup> mentions its main activities: school hygiene surveillance; prevention of communicable diseases; individual student medical inspection; student and faculty health education; and supervision of school physical exercise.

In 1924, Carlos Sá<sup>22</sup> established in Rio de Janeiro the "health platoons", which were groups of students who followed a "Decalogue" of health and moral rules with military discipline. Based on the German "Medical Police" model<sup>23</sup>, School Hygiene originated school health. To reorganize and reform society, the proposal built on a school health model based on hygienist and eugenic principles.

This health intervention model in public schools tended to (re) adjust students and teachers to follow healthy behaviors in order to avoid illness and conduct that deviate from the moral standards set by the State. Therefore, it blamed the population for the city's poverty and unhealthy situation. Concern for a healthy body introduced physical education classes in public schools.

During this period, Health Education action followed the logic of working in different settings and institutions in order to contain and control epidemics. Silva<sup>3,4</sup> noted that the reemergence of yellow fever in 1928, associated with the health situation, strengthened hygienist intervention, providing school health with a new hierarchical position in health services. Thus, the School Medical Inspection of Hygiene and Public Health became the Technical Sub-Directorate (1928) and later General Superintendence of Educa-

tion, Health and School Hygiene (1933). Costa<sup>24</sup> showed that until the 1940s, besides eugenic proposals, hygienic practice spread as a totalitarian ideology for everyday life and guided school hygiene service. Fontenelle<sup>25</sup> defines hygienic school reaffirming the model: *The hygienic school working with hygienic habits helps to educate all. Children acquire good habits and spread them at home, where they want everything to be exactly like in school, in which pure and healthy environment they easily get used to.* 

Efforts to avoid diseases and undesirable social behavior at school continued to inspire the latest school health proposals. Examples are preventive vaccination campaigns against diseases and meningitis and measles epidemics in the 1970s and cholera and dengue in the 1980s.

# 2- Health experts' discourse and its influence on Education

The dental care apparatus of the School Health Department, Municipal Secretariat of Education and Culture, Federal District, worked efficiently from 1940 to 196419. There were 22 School Health Districts, Secondary Education and Technical-Vocational Schools Health Service and several hospitals with various specialties to service students. This specialized model of doctors and dentists working at schools seemed appropriate for the referral of students to specialized clinics, whereas the Department of Education would be responsible for the transportation of students to health services. The parallel growth of the population and the administrative structure coupled with the lack of human and other resources, the transportation of students to services became incumbent on parents, who were members of the low income class and failed to meet this demand and were blamed for the failure of the program.

The developmental situation of the 1950s, with high grade repetition rates and low performance of students, inspired proposals of "biologization" and "naturalization" of school learning-related issues. The mistaken initiative of the health sector response in an effort to try and solve grade repetition and school dropout was to create the clinical examinations at school, aiming at increasing performance and minimizing hardships in student learning, which was diagnosed and labeled by authorities as "school failure". Thus, school health programs were now seen as an important proposal to promote "good learning" among students.

While analyzing the making of school failure, Patto<sup>26</sup> scathes educational psychology which, since the 1930s, strengthened the medical model and guided mental disorders diagnostic and treatment practice as causes and justifications of "school failure". The different locus of doctors and psychologists work ranged from psychiatric hospitals to mental hygiene clinics for school inspection services. So they worked in student assistance departments of secretariats of education as coordinators of multidisciplinary student care teams. This change led health experts to settle gradually in the field of education and, particularly, in elementary schools. They expected to solve the supposed causes of school failure through biomedical bias, but they only strengthened medicalization of the learning process<sup>27</sup>, since they disregarded the multiple causes of "school failure" (grade repetition and dropout). Since then, actions focused on children in unfavorable socioeconomic situations. The lack of responses and the same perspective led the following decades to prioritize investments in school meals programs (malnutrition) and neurological, visual and hearing screenings.

In this context, proposals have persisted in pointing isolated and specific issues as culprits of school learning issues. Malnutrition is now seen as a cause of school failure in the minds of health professionals and authorities responsible for the educational system. With these assumptions, there was great emphasis on school meals programs, which, on the one hand brought undeniable benefits, but did not reduce the so-called "school failure"<sup>2</sup>. Such ideas "justified" health as a learning basic condition and linked hindrances of low income classes in "achieving health and learning" to poverty and misery they endured and that led them, therefore, to illness and ignorance.

On the same lines, Moysés et al.<sup>28</sup> refute the idea of malnutrition as an impediment to learning. Valla and Hollanda<sup>2</sup> said that, despite the severe situation of Brazilian hunger, it was not the main cause of school failure. Marques<sup>29</sup> pointed out that severely malnourished children in early life were not even able to reach school benches and milder forms of malnutrition did not cause changes in the structure and functions of the brain. Therefore, malnutrition could not justify school failure. However, this remained the predominant model until the 1960s.

In 1964, under Carlos Lacerda's Government, a Health Division was established within the School Health Department and the Secondary Education and Technical-Vocational Schools

Health Service was extinguished. At the same time, hospitals which were in the Education sector were redirected to the Health sector, while other student service units were reassigned to the Secretariat of Social Services. It is worth noting that, notwithstanding this, health professional work remained based on clinical and care and therapeutic practice. In the dictatorial regime, the formulation of policies and programs were defined by State Decrees and the model was authoritatively imposed without the participation of school community, which decreased the chance of changing the program model.

Silva<sup>4,15</sup> reports that, while undertaking the task of diagnosing and treating any student learning and grade repetition issues, school health programs reinforced that the neurological, psychiatric and psychological aspects and diagnoses were responsible for school failure. Thus, they blamed them students for the school problems and the enormous social inequalities. This is when learning disorder, brain dysfunction, neurological deficits and behavioral disorders diagnoses start to emerge.

### 3 – Medical Specialties in the School Environment

With the designation of School Medicine in the 1970s, school health prioritized medical examinations in the regular inspection of students' health and created Health Records<sup>19</sup>. Such examinations would be performed on student admission to school and repeated every year in physical education classes, however, this occurred irregularly and few students were examined. Silva<sup>3,4,15</sup> criticizes the inefficiency of examinations, because repetition and dropout rates remained unchanged and they did not detect risks or express changes in health conditions. The most perverse consequence was to prioritize and require examinations for students labeled as having "disorders and / or learning difficulties".

In 1972, Rio de Janeiro school health was transferred from the Secretariat of Education to the Secretariat Health (Department of Public Health, Superintendence of Medical Services / SUSEME), but the model remain unchanged. School medicine was a major medical apparatus, with implantation of medical and dental office in schools. Health records were preserved, with priority for first graders with learning problems, for treatments and diagnostics by multidisciplinary teams in the sections of School Medicine (with at least a pediatrician, a psychiatrist, a dentist, a

psychologist, a nurse, a social worker and a counselor), inspection of school buildings, facilities and teaching materials<sup>30</sup>.

Health proposals that strengthened the welfare and therapeutic perspective were well accepted by Education, who attributed "school failure" to students' poor health. Although they are described in the programs guidelines, links between the Education and Health sectors was not effective. These programs also hardly seemed to meet the population's education and health needs.

This model "institutionalized" the culture of referrals to specialists and students' pilgrimage to health services. Technological advances in medicine, pharmaceutical industry and the emphasis on specialization propped this school health model. The problem was aggravated by the inability of medical specialists and services to provide accurate diagnoses in a timely manner in the curricular period. Although present in the classrooms<sup>3,4</sup>, the endless waiting time for treatment by experts excluded students from the learning process.

It is worth noting the challenges faced by multidisciplinary action on a student individualistic and compartmentalized basis. Mattos<sup>31</sup> criticizes the school medicine trend to abandon health records and value multidisciplinary teams, whose physician-centered training favored individualist practice and individual professional clinical and therapeutic reasoning, with the false idea of multidisciplinary integration.

The School Medicine model strengthened by the Special Programs of School Medicine (PRO-EME) in 1976 of Rio de Janeiro Municipal Health Secretariat (SMS)<sup>32</sup> continued with health records, visual and hearing acuity, vaccination control and created a referral sheet for students "fit" or "unfit" for learning. This fitness issue introduced mental health care. Psychologists, professionals who remained in Education<sup>26</sup>, joined the Health sector and strengthened multidisciplinary teams to tackle the "learning issues".

In the late 1970s, there was an increased involvement of health professionals with School Health due to the increase of congresses in this field, with events sponsored by the Brazilian Society of Pediatrics (School Health Committee) and the Brazilian School Health Association (1968). The national character of these associations broadened discussions with professional groups from São Paulo, which led to the creation of the Informal Group for Study and Discussion on School Health<sup>32</sup>.

Joint health and education committees emerged to replace School Medicine through the Integrated Operation Plan at central, regional and local management level. With coordination of the health sector, each part of the commission received a specific mandate: Health would regulate health activities and criteria, whereas Education would be in charge of the psycho-pedagogical activities and criteria that should be submitted to both sectors. With advances compared to previous models, this one appears in more recent proposals, with the predominance of hierarchy defining standards, without ensuring effective and shared action.

The 1980s witness the valuation of the model of education and health committees with student health care kept in the very health services, removing it from the bulge of Education. The Maternal and Child Protection Department, Public Health General Directorate was responsible for the regulation of the duties of the Medical School with its Special Programs, targeted at Municipal Health Centers with Specialized Units to service schools under its scope. There were attempts to have a school health "medical expert", mainly by the Brazilian Society of Pediatrics, as Pediatrics sub-expert, a professional that would lead the multidisciplinary team. The proposal was shelved with the argument that many specialized areas would not fit in the field of a single professional.

With the Alma-Ata Conference, emphasis on primary care and priority attention to the health of children aged 0-6 years and women, the organization of health services prioritized mother and child protection and implemented basic health care actions. This was a huge and important progress in health care and, on the other hand, removed from center-stage school group health care, defined as children aged 7-10 years, which is the expected age for elementary school entry (health did not set actions for this age group, and focused then its attention on adolescent health, starting from the age of 12 years).

#### **CIEP e CIAC:**

#### Medical equipment within schools

In the 1980s, two experiences in the city of Rio de Janeiro are worth mentioning, namely: the Public Education Integrated Center (CIEP) and the local experience of the José Paranhos Fontenelle Health Center in the suburb of Penha.

CIEP<sup>33</sup> implementation with national impact was re-purposed under President Collor Administration and renamed Children Service Integrated Centre (In 1992, Children Comprehensive Care Center, CIAC). Both redeployed health teams and equipment to the school environment, with medical and dental offices.

The political landscape of Rio de Janeiro under the Brizola Government (1982) produced more effective expectations regarding the conduct of health and education policies. CIEP proposed to reorganize education, such as the Darcy Ribeiro<sup>33</sup> educational reform. The model was questionable due to the requirement of medical apparatus within schools and the assumption that medical / dental activities would be decisive for the quality of education.

CIEP aimed at preventive medicine, educational and curative care actions. School medical practitioners would be in charge of the following: student admission clinical examination, anthropometric evaluation, health problems detection through individual clinical assessment, immunization coverage, nutritional and dental monitoring and visual screening. Health teams would consist of doctors, nurses, nursing assistants, dentists and psychologists, if necessary. In order to integrate doctors in the educational process and improve the physical, mental and social conditions of students, the health professional was idealized as having "a meticulous clinical experience, a teaching experience, the wisdom of a philosopher and the vision of a sociologist"33. Even with full retention of students in school and cultural and artistic activities, food and sports, the model has not progressed beyond clinical care aspect and the therapeutic logic persisted.

#### Penha (RJ) School Health Experience

As opposed to the CIEP/CIAC model, local expertise developed at the Penha Health Center was an innovative initiative, since it proposed more comprehensive health strategies, with integration of education services and initiatives, strategic stakeholders and civil society. Valla and Hollanda<sup>2</sup> questioned the traditional role of the Health Centre to restrict the health concept and the participation of civil society. Authors criticized biologicist concept-based health services and proposed their interaction with schools in their territorial bases. It was an alternative to tackle school failure, different from those proposed by official programs. In this experiment, the model showed benefits of community participation, adding knowledge and practices to health and education services. Health professionals, teachers, parents and responsible interacted in formatting services according to community needs and demands. Health Centre working groups facilitated conversations among various stakeholders and, on "School Health Week", health workers would visit schools and provide necessary medical care. But dialogue with everyone involved was valued, following-up on class councils and identifying in the whole group school and community main demands.

There was an increased participation of various sectors actively involved in the school health debate. As described in the document Educação, Saúde e Democracia: Perspectiva de Transformação<sup>34</sup> (free translation: "Education, Health and Democracy: a Prospect of Transformation"), dialogue hardships between Health and Education were all so unequivocal, given the mistrust and transfer of responsibilities produced by years of uncoordinated work. The proposal assumed that distrust would give way to a common venue of reflection on the need for coordination between these social practices. It was a somewhat different counter-hegemonic proposal to the CIEP model, designed by distinguished intellectuals at the government's forefront: Darcy Ribeiro in Education and Oscar Niemeyer in Architecture. Despite investments in health and innovation in education, the CIEP model guided student health care from the individual and clinical and therapeutic perspective and did not qualify dialogue and interaction between Health and Education from the perspective of integration between the two sectors.

Activities between the two sectors within the same physical environment did not produce changes toward an intersectoral sharing of plans, objectives, goals, resources and results, as we shall see in the health promotion model<sup>11</sup>.

# 4 – New approaches based on Health Promotion

#### Health Promoting Schools (HPS): A school health model innovation?

The International Health Promotion Conference<sup>17</sup> and the 8<sup>th</sup> National Health Conference<sup>12</sup> brought new references to the concept of health, valuing quality of life and citizenship rights. In the HPS model, the proposed school health actions were health promotion, with collective participation and construction, in the performance of community empowerment and autonomy of individuals who, with their own skills, would achieve better health and quality of life.

In the international context, PAHO proposed to reverse the biomedical and welfare nature of school health programs, reviewing the authoritarian bias of the health sector on education when planning these programs<sup>35</sup>. The context was favorable to set a proposed comprehensiveness of health actions, recognizing social and political dynamics and the centrality of intersectoral relations to promote school health. School community involvement in health promotion was the key factor, with relevance in training teachers and access to health services. It insisted on prioritizing regulatory actions for healthy habits, nutritious food supply in school cafeterias, strengthening formal and non-formal education methodologies, and new skills as an opportunity for human development, peace and equity.

WHO created the European Network of Health Promoting Schools and published in regional offices the Guide to Health Promoting Schools<sup>36</sup>. In the Americas, PAHO hosts, in Nicaragua<sup>35</sup>, the 1<sup>st</sup> Meeting of the Latin American Network of HPS (LANHPS) and seeks partnerships with education agencies such as EDC, UNESCO and UNICEF, FAO and the World Bank to review school health programs. Following LANHPS, some countries in the region mobilized to implement this model, while other preferred to consider them within their own context and characteristics.

HPS proposed that children and young people had to have good health in order to learn and benefit from the school's investments, and health is a prerequisite for education. Despite the validity of its principles, in practice, advances to produce new knowledge and integrating actions were limited, but it signaled the need to change and transform.

PAHO sought, as a strategy, to identify successful experiences in the Americas and Europe and, in competitions, awarded prizes to the Brazilian experience of the municipal school of Rio de Janeiro<sup>37</sup> due to the inclusion of health issues in the political pedagogical project.

Brazil has failed to establish an HPS-based school health policy, but it appreciated regional and local experiences, in Rio de Janeiro/RJ, Embu/SP, Maceió/AL, Curitiba/PR and Palmas/TO<sup>38</sup>, all relevant to the production of knowledge about school health, valuing local contexts, interests and desires of the communities and territories.

In 2005 (Lula Government), school was valued as an environment establishing the rights of citizens, social subjects who are critical, creative and builders of knowledge and relationships that strengthen participation toward a healthier life. There was a more coordinated approach between

the Ministry of Health and the Ministry Education, with the production of school health rooted in participatory, democratic and civil principles. Its base was to involve school community, students, workers, education and health managers, social movements, associations and others, with references to restructure proposals by the Ministry of Health (2003). The Department of Health Education Management established the General Coordination of Popular Actions of Health Education, based on Popular Health Education, aimed at strengthening strategic actions of reorienting health practices from knowledge and shared knowledge, political projects that would produce new meanings in relationships between the population and health care organization<sup>39</sup>. Called "Escola que Produz Saúde" (free translation: "Health-producing school"), the proposal did not prevail, but marked important changeover by proposing health shifting from the biological field and biomedical action that gave color to school health practices. It proposed to value the social historical aspects, basic needs, beliefs and rights of citizenship<sup>40</sup>. However, the National Health Promotion Policy (PNPS)17 later redirected the debate.

The PNPS guided health as a complex social production with multiple determinants, advocating participation of subjects involved as a challenge to the cross-sectional, integrated and intersectoral policy dialogue with various areas of the Health sector and other government, private institutions and non-governmental sectors and society as a whole. However, the PNPS restricted its implementation focusing on healthy eating actions, body practices / physical activity and tobacco-free environment prioritized in the biennium 2006-2007 as strategic action for the construction of HPS indicators.

Twenty years into the cornerstones of health promotion<sup>12</sup>, the National Commission on Social Determinants of Health (CNDSS)<sup>41</sup> is considered in Brazil as yet another milestone for the change of the biomedical model of school health promotion. The Commission heated the debate by seeking reversal of other factors in determining the living conditions of individuals and communities and to understand the need to address social, economic, cultural, ethnic, psychological and behavioral processes as determinants of health and quality of life issues of the school community.

Thus, in its recommendations, the CNDSS contributed to the formulation of school health programs, when it highlights the importance of: (a) intersectoral programs, with design and

formulation of cross-cutting actions in different government sectors; (b) sectoral programs formulated in different ministries linked to the local context; (c) sectoral programs formulated by a single ministry, but covering various issues and groups. In addition to underscoring the intersectoral model with effective articulation of stakeholders and institutions in various stages of program development and implementation, it mentions implying this in horizontal (across sectors) and vertical (across government spheres) relationships.

Outstanding contributions to intersectoral action in school health promotion programs and conceptual references stem from appreciating and debating community participation<sup>9</sup> and analyzing the interrelation across the various levels of government to determine the nature of the governance model, as proposed by Burris et al.<sup>42</sup>. Thus, the implementation of a program occurs at the local level depending on political, organizational and local management conditions.

#### National School Health Program (PSE)

In addition to the National Health Promotion Policy<sup>17</sup>, the National Primary Care Policy<sup>43</sup>, the School Health Program (PSE) established by Presidential Decree<sup>18</sup> has guidelines on comprehensive educational and health activities as intersectoral and territorial implementation efforts and horizontal coordination. The integrated work between the Ministries of Health and Education provides for intersectoral dialogue and more comprehensive actions in the context of a national school health policy.

As a proposed intersectoral policy, the PSE set strategic actions to be carried out between 2008 and 2011 through the adhesion of municipalities. It proposes health comprehensive care (prevention, promotion and care) for children, adolescents and young people from public schools (kindergarten, primary and secondary education and vocational and technological education aimed at young people and adults). Integrating practices in the universe of schools and basic health units, with emphasis on primary health care through the Family Health Strategy (ESF) and health care logic.

The PSE proposed school as a collective community environment, revitalizing information and concepts that shall contribute to healthier communities. It assumes health promotion with decentralization and respect to federative autonomy, integration and coordination of public

schools and health care, territoriality, interdisciplinary and intersectoral approach, integrality, social control, monitoring and permanent evaluation. It provides joint actions of the Unified Health System (SUS) with the actions of public basic education, to increase the outreach and impact on the health conditions of students and their families, optimizing space, equipment and resources available.

PSE components were defined as follows: (1) assessment of health conditions; (2) health promotion and prevention; (3) continuing education and training of professionals and young people; (4) monitoring and evaluation of students' health. However, as in the PNPS, it prioritizes specific aspects: nutrition, physical activity, tobacco and other drugs, issues of sexuality and reproductive health and research<sup>44</sup> to assess and monitor the health of schoolchildren. This model also emphasizes the care aspect of clinical, psychosocial, nutritional and dental evaluation of students.

Further studies may qualify the analysis of the implementation of this model, but it is worth highlighting positive aspects, such as: (a) Establishment of the Intersectoral Education and School Health Committee (CIESE)45 as the HPS model, to strengthen intersectoral actions in municipalities with state representation, Education and Health Councils; (b) Valuation of primary health care, to increase access and territorial logic; (c) Securing specific federal funds to implement the program. In Health: monthly incentive to ESF and oral health teams. In Education: resources to municipalities as medical tools and equipment, materials for training and qualification of school professionals; (d) Development of indicators from school health activities in the municipalities. However, the dichotomy of distribution of resources and different time and nature disrupted the organization of Local Projects in the municipalities that joined the PSE46. PSE's challenge in municipalities was to respect autonomy of management, organizational skills and health policies that define the school health model in each territory and include qualitative components that recognize good school health practices through evaluation models that exceed the restricted quantitative indicators focused on risk prevention actions, which differs from the evaluation models proposed in health promotion<sup>8,47,48</sup>.

In short, Chart 1 shows the main school health models identified by theory, nature, characteristics and extent of coordination between health and education.

**Chart 1.** Matrix of different Theoretical Health School Models<sup>50</sup>.

School Health Model	Theory	Coordination between sectors	Main features
Hygienist	Practice promoting behavioral and even moral change. Avoid disease spread. Prepare the body as labor force. Health seen as absence of disease. Individual is responsible for his own health.	Authoritarian and regulation-oriented. Health sector defines what should be done and schools accept passively. Knowledge is ready (Top Down).	Authoritarian and discipline-oriented. Prevention-oriented. Predetermined model. Top-Down centralized action. Central decision-making power not allowing participation.
Specialized Biomedical	Care and cure hospital-based practice. Medicalization of learning issues. Knowledge belongs to the expert who has a fragmented view of the individual. Individualistic and compartmentalized. Health as absence of disease, which relies on the expert's analysis / action.	Organized from the perspective of medical care. Priority access to specialized health services. Authority with prior knowledge. Does not allow construction of new knowledge. Each sector has own knowledge and there is no exchange.	Prioritizes specialized medicine. Access to more complex services. Does not value primary health care. Medicalizes school failure.
Use of school premises to set equipment and health services	Creates outpatient services for school care. Coexistence of health and education professionals in the same physical environment: the school. Health concept still seen as absence of disease with priority for treatment and cure. Prevention-oriented nature to prevent health from compromising learning.	Physical presence in the common area. Not sharing goals, objectives and decisions. Mostly disconnected actions. Territorialization not contextualized – fields are separated: schools and health services. It does not generate new knowledge.	Health actions not in the same context of health services network. Priority for care practices. Coordination of actions remains isolated. Noncompliant with SUS principles. Decision-making power is specific to each sector and does not propose active participation.
Health Promotion	Individual empowerment. Decentralized action (Bottom up). Coordinates knowledge and different expertise (specialized and popular). Promotes dialogue and interaction of social issues with health.	Social theory with strong focus on experience. Shared objectives, goals and resources. The two sectors are recognized as active partners in the process. Decision-making power is shared between the two sectors and the school community. Coordination across different levels of government and other partners involved.	Occurs in the context of human relations. Builds knowledge and expertise. Community-based. Pedagogical projects. Emphasis on contextualization and territorialization of school environment. Respect for health network with appreciation of primary health care in the context of the territory.

#### **Final Considerations**

From various historical contexts and theoretical frameworks we were able to analyze the tension that is embedded to this very day among the sectors of Health and Education. The historical development of this intersectoral coordination in Rio de Janeiro and in the country against the school backdrop revealed the poor articulation and fragility of intersectoral dialogue. The biomedical hegemonic discourse sets out priority issues from the health perspective, very little debated by the school community in historical analyzed contexts. Although it varied with contexts, the discourse remained often vertically imposed on schools.

Innovative proposals influenced by the health promotion debate try to break with the hegemonic discourse seek to recognize the context and the school's role in building knowledge and expertise. The conceptual framework of health promotion as we sought to show brings a new benchmark where more dialogic and reflective initiatives from the practical experience of stakeholders take center-stage. Very centralized and imposed top-down proposals cause resistance of professionals responsible for the actions, preventing the necessary exchange of knowledge and experience between the two sectors.

Today, integrated prevention and health promotion strategies in schools imply an approach that takes into account the context and recognition of the school community in its diversity as subjects of knowledge and expertise. Intersectoral partnerships and actions are more effective when they gather and dialogue with the plurality of institutional and non-institutional stakeholders involved and interested. Therefore, health promotion builds conceptual strategies and references in which intersectorality is understood as a Health and Education interrelation process<sup>11</sup>.

Intersectorality is now very widespread as a public policy strategy, but has little scope or positive effects. While planned and designed from its inception, it is a slow process of trust in constant dialogue. Otherwise, it is possible that it becomes simple juxtaposition of different sectoral agendas without actually meaning a shared agenda and intersectoral action<sup>49</sup>. Therefore, although today it is mentioned in all proposals, intersectoral action shared between the Education and Health sectors does not seem to translate into innovative intersectoral practice. As a result, school health programs still have a lot to go for toward a more integrated and innovative approach. Intersec-

toral action has to be negotiated and included in the routine and in professional practice, allowing the construction of more dialogic and contextualized knowledge for more effective school health policies.

In short, as shown in Chart 1, the analysis identified the following models: (a) hygienist, regulatory and disciplinary of behaviors and health practices, with a clear moralist component; (b) models that gather specialized therapeutic medical apparatus, trying to respond to "school failure" and students various learning hardships; (c) models that create joint education and health committees to redirect actions to the health sector; (d) models that rebuild health service in schools; and (e) models targeting early childhood, and therefore shift the issue to the maternal and child field, leaving school health in the background.

On the other hand, we also saw school health models influenced by health promotion benchmarks, such as (f) health-producing schools, with emphasis on popular health education; (g) international health-promoting schools initiatives, which, while not materializing as program or national school health policy in Brazil, broadened reflection on the review of school health practices in different regions of the country; and (h) Current developing project of the School Health Program (PSE), which features among its components permanent education as a problem-solving strategy (Freirian education model), but where the clinical care component remains very strong.

Despite advances in the face of various intersectoral proposals, it was possible to identify the hegemonic discourse of biomedicine, with considerable weight in the design of health policies, as well as education concepts. In this scenario, the Education sector does not seem to respond more proactively to health care proposals, it does enter into further dialogue and does not debate changes. Thus, school health was conceived rather as a product of a "compensatory" action between sectors whose policies do not meet the health and educational needs of the population.

The political scenarios and historical contexts discussed and analyzed framed actions and programs. Recently, experiences that prioritized more dialogical, participatory and thus bottom-up proposals to ensure greater involvement of professionals also ensure greater effectiveness. By allowing further intersectoral action and educational community empowerment, they bring new meaning to "health", which is no longer seen as restricted to biological features and risk and illness factors. Instead, they increase the

understanding that health is a process socially produced from the daily lives and experiences of people and, particularly in this analysis, school community.

#### **Collaborations**

CS Silva participated in and contributed to the concept, design, analysis and interpretation of study findings and wording; RCA Bodstein contributed to the study design, analysis, review and final wording.

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