

# School Hygiene and Public Health in Salvador (1925–1930)

# Higiene Escolar e Saúde Pública em Salvador (1925-1930)¹

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#### ABSTRACT

This article analyzes how School Hygiene proposals were put into practice by the Bahia Child and School Hygiene Directorate, in the city of Salvador, during the Sanitary Reform of Bahia (1925-1930). Reports from the Undersecretary and Secretary of Health and Public Assistance, reports from the Child and School Hygiene Directorate, a medical thesis and a message from the governor are used as sources. The documents are analyzed as monuments, that is, bearers of the intention of the individuals who produced them, as highlighted by Jacques Le Goff (2003). It is understood that the Sanitary Reform of Bahia contributed to the improvement of School Hygiene by inspecting institutions, carrying out examinations, and assisting poor children assisted at the School Dispensary. Although Health Education was considered the main instrument to promote health improvement, it encountered obstacles in the difficult material living conditions of black women and children in Salvador.

Keywords: School Hygiene. Child Hygiene. Sanitary Reform.

#### **RESUMO**

Este artigo analisa como propostas de Higiene Escolar foram colocadas em prática pela Diretoria de Higiene Infantil e Escolar da Bahia, na cidade de Salvador, durante a Reforma Sanitária da Bahia (1925-1930). São utilizados como fontes relatórios das Subsecretaria e Secretaria de Saúde e Assistência Pública, relatórios da Diretoria de Higiene Infantil e Escolar, uma tese médica e uma mensagem de governador. Os documentos são analisados como monumentos, ou seja,

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portadores de intencionalidade dos indivíduos que os produziram, conforme destaca Jacques Le Goff (2003). Compreende-se que a Reforma Sanitária da Bahia contribuiu para a melhoria da Higiene Escolar com a inspeção de instituições, realização de exames e assistência às crianças pobres atendidas no Dispensário Escolar. Embora a Educação Sanitária fosse considerada o principal instrumento para promover a melhoria da saúde, encontrava empecilhos nas difíceis condições materiais de vida de mulheres e crianças negras em Salvador.

Palavras-chave: Higiene Escolar. Higiene Infantil. Reforma Sanitária.

## Introduction

This paper analyzes the activity of the Diretoria de Higiene Infantil e Escolar da Bahia [Bahia Department of Child and School Hygiene] (DHIE) between 1925 and 1930. Initially, the DHIE was part of the Subsecretaria de Saúde e Assistência Pública [Undersecretariat of Health and Public Assistance] (SSSAP), created in 1925. In 1927, Antônio Luis Cavalcanti de Albuquerque de Barros Barreto – an inspector with the Departamento Nacional de Saúde Pública [National Department of Public Health] (DNSP) and a former Rockefeller Foundation fellow—transformed the SSSAP into the Secretaria de Saúde e Assistência Pública [Secretariat of Health and Public Assistance] (SSAP). The SSSAP reported directly to Governor Francisco Marques de Góes Calmon (1924–1928). During the last years of the First Republic, this agency also developed important health initiatives for the state of Bahia (BATISTA; SILVA, 2020).

Barros Barreto graduated from the Curso de Aplicação do Instituto Oswaldo Cruz [Application Course of the Oswaldo Cruz Institute] (IOC) in 1913 and from the Medicine Faculty of Rio de Janeiro (FMRJ) in 1917. He also studied at Johns Hopkins University, funded by the Rockefeller Foundation (1921–1922). From the United States, he made his way to Europe (1922–1923), where he earned a doctorate in venereology (BATISTA, 2019a). Back in Brazil, he worked in Paraná and later in Bahia, where he led the Sanitary Reform (BATISTA, 2019b). As part of the reform, proposed guidelines included a provision in Bahia's Health Code that permitted doctors to receive training at teaching and research centers, in addition to visiting exemplary national and international institutions, thereby expanding the links between state medicine and various European and North American health institutions. For example, professors from the Medicine Faculty of Bahia (FMB) studied at the Johns Hopkins University in Baltimore (BATISTA, 2020a), and others, such as Colombo Spínola, traveled to Europe to understand the school hygiene practices on that continent.

Although there is a significant amount of historical research on child hygiene in Bahia (FERREIRA; FREIRE, 2011; FERREIRA; RIBEIRO, 2016; MOREIRA, 2017; RIBEIRO, 2011; RIBEIRO; FERREIRA, 2015), no works specifically focusing on the DHIE during the 1920s Sanitary Reform were found. The sources used in this research are the SSSAP, the SSAP, and the DHIE reports, a travelog, a FMB thesis, and

a message from a governor of Bahia. These traces are considered to carry the interests of the individuals and institutions to which they belonged. According to Jacques Le Goff (2003, p. 535-536, translated by the author), the historian's main task is to criticize the document as a monument: "The document is not just something that belongs to the past, but rather a product of the society that produced it, according to the power relations that prevailed therein.". The central question that guides this research is: how were proposals for school hygiene put into practice in Bahia during the Sanitary Reform of 1925–1930?

In addition to this introduction, the text consists of three other sections. The first one discusses the sanitary reform through which Antônio de Barros Barreto proposed the training of public servants in reference centers for child and school hygiene, highlighting health education as one of the means proposed to achieve health objectives. The second section analyzes the actions of the DHIE in Salvador. Finally, the concluding remarks provide a balance of what has been discussed throughout the text.

## Reform, professional training, and health education in Bahia

According to Luiz Antônio de Castro Santos e Lina Faria (2003), in the 1920s, health became a social issue in Brazil. This fact was due to the reflection of the deepening of the intervention of the states of the Union in health and their rural sanitation policies. These policies emphasized the need to eradicate the "great endemics of the sertões [backlands]". The process was driven by the sanitation movement, with the participation of doctors and scientists from the Oswaldo Cruz Institute (IOC). The doctors and scientists visited places far from large urban centers, observed the terrible health conditions of Brazilians, and distributed photographs of the sick and neglected population by the Government to media outlets in the Southeast (HOCHMAN, 1998; THIELEN et al., 1992).

The spread of these ideas contributed to the creation of a "sanitary conscience" among the Brazilian elites, who recognized the need to create goods and services to fight the so-called "contagious diseases", especially after the *influenza* pandemic of 1918 (HOCHMAN, 1998; SOUZA, 2009). In this context, the DNSP was created and configured as a national body that respected the prerogatives of the federalist pact of 1891. Consequently, for states to receive technical guidance and financial assistance from the Federal Government, they had to enter into agreements.

During the government of José Joaquim Seabra (1920–1924), on April 15, 1921, the state and the Union signed an agreement to expand the action against endemic and epidemic diseases in Bahia. The agreement provided for the implementation of the Serviço de Saneamento Rural [Rural Sanitation Service], the fight against leprosy and venereal diseases, the fight against tuberculosis, and the care of children's hygiene for a period of three years. On February 29, 1924, the agreement was renewed for another

five years. On March 21, 1925, the pact was revised with the addition of an amendment containing several clauses, including the following:

First – The Government of the State of Bahia accepts and undertakes to promote the acceptance by the municipalities of all the sanitary laws, technical and administrative instructions, and other dispositions of the Departamento Nacional de Saúde Pública [National Department of Public Health], with reference to the federal sanitary services carried out in the State. [...]

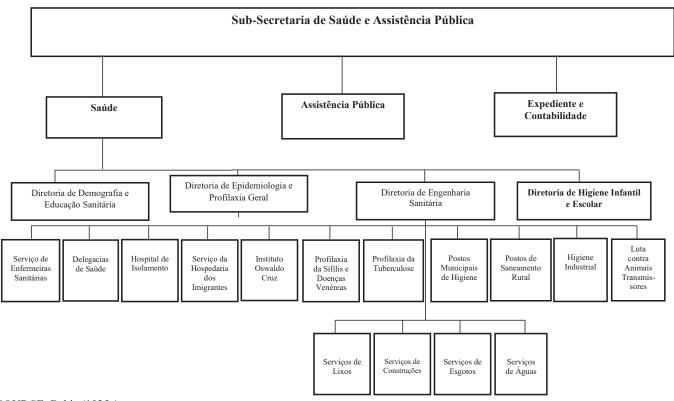
Third – The sanitary services established by the present amendment shall be carried out for three years, beginning in nineteen twenty-five, without the intervention of any state or municipal authority, by the commissions organized by the Departmento Nacional de Saude [National Health Department]. [...] (BARRETO, 1927, p. 176).

The proposal of the amendment occurred during the sanitary administration of Antônio de Barros Barreto. Barros Barreto arrived in Bahia after a disagreement between the previous DNSP representative in the state, Sebastião Barroso, and the Rockefeller Foundation about the best methods to destroy the *Aedes aegypti* larvae and control yellow fever. This conflict led the sanitarist to resign from his position (BENCHIMOL *et al.*, 2001).

Despite initial resistance from Bahia's political and medical elites, the new federal representative gained acceptance among the economically dominant groups. After Batista e Silva (2020), the confluence of his training in Manguinhos (IOC) and at the Rockefeller Foundation, the position as sanitary chief in the three levels of government (local [Salvador], state, and federal), and the good relationship with Góes Calmon, including being his son-in-law, helped to ensure the autonomy necessary to implement the health policies he defended.

The SSSAP (Figure 1), created during the Sanitary Reform of Bahia, was divided into four divisions: Demography and Health Education Directorate, Epidemiology and General Prophylaxis Directorate, Sanitary Engineering Directorate, and Child and School Hygiene Directorate. The Serviço de Higiene Infantil [Child Hygiene Service] (SHI), inaugurated in 1923 and linked to the DNSP in Rio de Janeiro, directed the child hygiene actions in Bahia. Meanwhile, the DHIE was exclusively dedicated to the service provided in schools (GESTEIRA, 1931).

#### FIGURE 1 - ORGANIZATION CHART OF THE HEALTH SERVICES OF THE UNDERSECRETARIAT OF HEALTH AND PUBLIC ASSISTANCE



SOURCE: Bahia (1925a).

Doctor Joaquim Martagão Gesteira was in charge of the Child and School Hygiene Directorate. Born in Conceição do Almeida, in the Recôncavo region of Bahia, Martagão Gesteira graduated from the Medicine Faculty of Bahia (FMB) in 1908 and subsequently became a professor of Internal Medicine and Child Hygiene at the same institution. In 1923, the doctor founded the Liga Baiana Contra a Mortalidade Infantil [Bahia League Against Child Mortality] (LBCMI) with Álvaro Pontes Bahia, an assistant of the same chair. According to Lidiane Ribeiro and Luiz Otávio Ferreira (2015, p. 250), the LBCMI constituted a space for medical assistance and training, serving two distinct audiences: poor women for providing maternal and child medical care and maternal education, and medical students interested in pediatrics and child health. The LBCMI acted as a model care institution, following national standards, while the SHI functioned as a normative and supervisory body for childcare services. However, in practice, Martagão Gesteira's direction of both institutions led to a mixing of their functions.

In addition to Gesteira and Álvaro Bahia, Christovam Colombo Moreira Spínola was also a physician assigned by the SSAP for further training in School Hygiene. He was born in Salvador on July 14, 1894, and died on September 7, 1973. Throughout his career, Spínola was a professor at the Escola Bahiana de Oftalmologia [Ophthalmology School of Bahia], founder and president of the Fundação Contra a Cegueira Santa Luzia [Foundation Against Blindness Santa Luzia], founder of the Academia Bahiana de Medicina [Bahia Academy of Medicine], and a member of the Sociétè Française d'Ophthalmologie [French Society of Ophthalmology] (JBO, 2015). In 1934, he became a full professor in the chair of Ophthalmology Clinic at the FMB (FORTUNA, 2013-2014). In 1929, he was an assistant at the DHIE and traveled to Europe to observe the operation of educational institutions. After his return, he contributed to the improvement of child health that was already being developed in schools throughout Bahia, as well as in other settings. Going abroad was made possible by the establishment of the Bahia's Health Code, also created in 1925:

Art. 8 The Government may, upon request, send technical personnel from the Sub-Secretaria de Saúde e Assistência Publica [Undersecretariat of Health and Public Assistance] to improve their studies at the Oswaldo Cruz Institute in Rio de Janeiro, at the Public Health Courses of the University of the Federal Capital, and at similar foreign institutions, for a certain period. (BAHIA, 1925a, p. 9, translated by the author).

The article 8 of the Health Code was an important element in promoting the internationalization of Bahia's health. According to Barros Barreto (1928), the Secretariat had already sent personnel to North America, France, Germany, Switzerland, Argentina, and Uruguay, as well as to Rio de Janeiro and São Paulo. Below are highlighted trips related to Child and School Hygiene, and related ones, as the training on health centers and visiting nurses also included the topic of childhood (Chart 1).

CHART 1 – TRAINING IN BRAZIL AND ABROAD IN THE FIELD OF CHILD AND SCHOOL HYGIENE

	Name	Destination	Purpose of the trip
1	Dr. Alvaro Franca Rocha	France and Germany	Child Hygiene
2	Dr. Colombo Spinola	France, Germany, and Switzerland	School Hygiene
3	Dr. Dionysio Pereira	Rio de Janeiro and São Paulo	Health Centers
4	Dr. Colombo Spinola	Rio de Janeiro and São Paulo	School Hygiene
5	Nurse Estephania Barros	Rio de Janeiro	DNSP Nursing Course
6	Nurse Aurelia Pitanga	Rio de Janeiro	DNSP Nursing Course

SOURCE: prepared based on Barreto (1928, p. 26).

The information in the chart shows that Colombo Spínola visited Rio de Janeiro, São Paulo, France, Germany, and Switzerland. Regarding the purpose of the international trip, Ribeiro (2015, p. 101) states that not only Martagão Gesteira but also Columbo Spínola undertook a fact-finding mission to Europe at the request of the Bahia government. The primary objective of the trip was to learn about the different types of maternal and child support work that existed on that continent. During his stay abroad, Gesteira observed that Brazilian philanthropic actions in favor of pregnant women, women in labor, and newborns were similar to those observed in the countries he had visited, except for the participation of the public power in the coordination and support of these actions, which was minimal in Brazil. Still, for the pediatrician, the lack of standard guidelines was the reason why, despite numerous philanthropic initiatives, Brazil had unsatisfactory results concerning mother-child protection. Colombo Spínola's travelog presents his impressions of School Hygiene activities in Europe. Health education, about which he made observations, was also an issue present in the guidelines of the Sanitary Reform of Bahia. One such experience showed him that:

A well-targeted health education section is a must for any public health campaign. And this teaching should not be limited only to the people who attend dispensaries and public assistance works but should also penetrate all homes, and public and private schools, thanks to these precious "health missionaries" who are the health nurses. (SPÍNOLA, 1929, p. 13, translated by the author).

Spinola visited the *Office national d'hygiene sociale* [National Office of Social Hygiene] on Boulevard Vaugirard in Paris, whose health education department he considered one of the most complete. One of the instruments used to carry out this practice was the cinematograph, since the cinema was an "[..] idea that was being born all over the world" and had the advantage of better "engraving" information on the spectator better than newspaper articles and spoken lectures (SPÍNOLA, 1929, p. 14, translated by the author). In this perspective, doctors saw the people to be educated as mere recipients of knowledge, and believed they could "inscribe" certain information into the population. Such a perspective was also attempted through radiotelephony,

posters, brochures, postcards, and other means of dissemination in French schools. Moreover, Spínola highlighted the role of visiting nurses who became the center of disease control policies such as syphilis (BATISTA, 2016; 2017) and tuberculosis (SILVA, 2018) in many places in Brazil, including Bahia. For syphilis in particular, the nurses were responsible for finding the people "most likely to transmit the disease" and persuading them to seek health care.

Health education and health propaganda were also an important theme for many sanitarists who had trained in the United States in the early 1920s, such as Barros Barreto. Barreto (1923) published texts on the North American educational proposals and the national initiatives disseminated by Oswaldo Cruz and institutionalized with the creation of the Diretoria de Educação e Propaganda [Education and Propaganda Directorate] of the DNSP, attached to the Inspetoria de Demografia Sanitária Federal [Federal Health Demography Inspectorate]. Like other former Rockefeller Foundation fellows, such as Geraldo Horácio de Paula Souza, who led the Sanitary Reform of São Paulo, the then-secretary of the Bahia institution created posters to educate the population about hygienic habits. Child Hygiene is one of the topics addressed in the graphic material (Figure 2).

FIGURE 2 – SECRETARIAT OF HEALTH AND PUBLIC ASSISTANCE POSTERS





SOURCE: Barreto (1928).

The above images demonstrate DHIE's intention to broaden the Bahian population's understanding of childhood care. Although DHIE's proposal aimed to reach a broad audience, the figures used in the posters are much closer to the reality of the economic elites than that of the poor people. Also, the figures depict white children, except for one black child used as an example for checking children's weight and height. The poster on the left also conveys that it is necessary to monitor children's growth to ensure their healthy future. The poster on the right, in turn, shows the health consequences of tooth decay, highlighting the spread of oral diseases.

This material was in line with the positive expectation of building a nationality expected to be achieved through childhood in the 1920s, which justified the hygienist doctors' concern with the formation of children's character, and which inspired many articles on the subject. As in other instances in the political and social spheres, a demonstration of the convergence of interests and actions of Brazil's intellectual elites was, for example, the inclusion of the sanitization of children's minds on the agenda of institutions such as the Associação Brasileira de Educação [Brazilian Association of Education] (ABE) and the Liga Brasileira de Higiene Mental [Brazilian League of Mental Hygiene] (LBHM) (FREIRE, 2008).

The ABE was founded in October 1924 in a room at the Polytechnic School of Rio de Janeiro. According to Marta Maria Chagas de Carvalho (1998), the pedagogical proposals conveyed in and by the school can be read as a broad program of social action. Carvalho (1998) highlights the similarity between the educational campaign promoted by the institution and other nationalist movements of the 1920s, which brought together sanitarists committed to the propagation of Health Education, such as Belisário Penna. With a wide circulation in the educational field and a significant presence in the ABE, Penna prescribed hygiene as a measure of protection for both the individual and the collective organism because this would teach how to modify, remove, or eliminate the causes of debility from any environment (CARVALHO, 1998).

The experiences of Colombo Spínola and Barros Barreto point to the importance of promoting Child (and School) Hygiene in Europe and the United States in the 1920s. Although it is possible to observe the expansion of a North American medical influence at the expense of European medicine among Brazilians (CUETO; PALMER, 2016), there were similar elements in these knowledge traditions. With all its peculiarities (including the promotion of different health institutions: dispensaries among Europeans and health centers among Americans), Health Education was not only seen as a means to end certain diseases but also became an important issue for professionals in Brazil, especially after the activities of the DNSP.

## School Hygiene in Bahia

José Gondra (2004) observed Brazilian doctors' concern with Child and School Hygiene throughout the 19th century. Also, Gondra (2004) analyzed the institutionalization of Medicine and the education of physicians through FMRJ's theses that defended the hygienic education of the populations to fight what they considered "incivility". For the author, a specific model of school organization, characterized by a medical-hygienic rationality, emerged within the medical order, even though childhood was not yet taken as an object of systematic study at that time (GONDRA, 2004). Medicine only shifted from a generalist model to specializing in specific chairs with the educational reform that began in 1879 (BATISTA, 2015). During that time, the field of education was also moving towards specialization, with the establishment of institutions and practices aimed at legitimizing the field, both within and outside of the state apparatus, which received significant attention (GONDRA, 2004, p. 481).

In the early decades of the 20th century, medical students at the FMB also wrote about School Hygiene. For instance, the thesis of Joaquim de Britto Costa (1920), defended at the FMB Chair of Hygiene, presents the main issues that mobilized physicians interested in childhood. In the first chapter of his work, Costa (1920) discussed aspects of the school building, such as lighting and ventilation, and provided guidelines to make the environment healthy. In the second chapter on school furniture, Costa (1920) emphasized the need to adapt desks to students rather than students to desks. Finally, he described the sanitary organization of the public schools in Salvador with a report based on field observations (COSTA, 1920).

According to Costa (1920, p. 51, translated by the author): "Unfortunately, those [schools] I have visited are far from what they should be. In all of them, the rules of hygiene are violated and broken; the victorious ideas of this science are careless and neglected." The buildings used as school facilities were one of the main complaints reported since "The choice of school buildings in Bahia generally does not follow the most rudimentary scientific criterion [...] there is a contrast between the improvements of the city and our schools'." (COSTA, 1920, p. 53-54).

One considered necessary to review aspects such as lighting and ventilation, inadequate furniture, the proximity of a school to the Santa Casa de Misericórdia Hospital, and the lack of physical education in the curriculum. According to Heloísa Rocha (2022), these proposals sought to meet the expectations of other Brazilian physicians, such as José Paranhos Fontanelle, for whom it was necessary to make the school a healthy environment. Fontanelle also believed that teachers should be role models, both at school and at home, as they would ensure the success of hygienic education, which would involve acquiring healthy habits (ROCHA, 2022). The first step in achieving this goal was to ensure a suitable environment.

The DHIE of Bahia was created to modify the service offered by schools, especially in the area of health. Inaugurated in August 1925, in a room with furniture lent by the LBCMI, the DHIE devoted its first year to its organization while trying to study the conditions of public and private schools in Salvador (GESTEIRA, 1931). The research carried out by the Director of the DHIE classified the school facilities from a hygienic point of view according to three criteria considered as capital for a healthy environment: 1) condition of the school building, 2) air and natural lighting, and 3) capacity of the facilities.

The schools considered "acceptable" for fulfilling the three conditions underwent a new classification according to the following hygienic conditions: 1) cleanliness, 2) water, 3) sanitary installations, and 4) furniture (GESTEIRA, 1931). Schools that met all of the requirements were rated "great". Those that met more than half of the criteria were rated "good". And those that met less than half of the satisfactory items were rated "poor".

Cross-checking the data of the report on the work of 1925 (and mentioned in the report on the actions taken in 1930, but dated 1931), Martagão Gesteira compared the improvements in education based on the actions of the Directorate he headed. In 1925, the DHIE visited 136 public schools. In 1930, after closing many buildings that were not suitable for schools, the DHIE adopted a preference for "Escolas Reunidas" [United Schools], which numbered 41 institutions in Bahia (Chart 2).

CHART 2 - COMPARISON OF SCHOOL CONDITIONS IN 1925 AND 1930

School conditions	1925	1930
Great	0 (0%)	2 (4,87%)
Good	2 (1,48%)	9 (21,95%)
Poor	53 (38,97%)	21 (51,21%)
Bad	81 (59,55%	9 (21,95%)
Total	136	41

SOURCE: prepared based on Gesteira (1931).

The category "united schools" was intended to be implemented in the municipalities where the school population was insufficient to form a school group. In addition, united schools linked schools together. In this regard, Governor Francisco Marques de Góes Calmon asserted that these schools brought advantages to the state:

The united schools, the modest and small school group, adapted to our environment, brought the reform, recognizing that the reunion of schools, besides economic advantages, brings advantages of pedagogical character and reciprocal supervision. The united schools will stimulate each other while, under a single direction, they will have a more uniform and complete primary education. The school group, a more luxurious organization, will be left to the cities where

social and natural needs require its creation. (BAHIA, 1925b, p. 69, translated by the author).

With the closure and unification of many school units, Gesteira affirmed that almost all public schools in the capital were equipped with more or less satisfactory furniture. Although the physician attempted to take stock of the activities carried out during his administration – and thus highlighted the measures he adopted between 1925 and 1930 – the use of the term "more or less" shows temperance in the analysis of his achievements. Gesteira did not claim to have realized the "ideal", but what was possible under the given conditions. He also admitted that, despite the Directorate's actions, he failed to oblige those responsible for private schools to register their establishments. This fact required the Directoria Geral de Instrução [General Directorate of Education] to prevent registrations and licenses for opening private schools "[...] without the competent Repartição Sanitária [Health Department] commenting on the hygienic conditions of these schools, which unfortunately did not happen." (GESTEIRA, 1931, p. 4-5).

One of the methods used by Martagão Gesteira and Colombo Spínola to control the hygienic conditions of the schools was to visit them regularly twice a year. The first visit took place at the end of the school year, during which the necessary improvements were identified, and the facility managers were instructed to implement them; and the second visit took place before school resumed to check whether the requirements had been met (GESTEIRA, 1931, p. 5). Moreover, there was sometimes a discrepancy between the proposals of the DHIE and the Directoria de Instrução [Directorate of Education]. For example, in the early 1930s, the Directorate of Education rented many buildings without regard for Child Hygiene. This event led to a representation by Martagão Gesteira to the Secretariat of Health and Public Assistance on June 17, published in the Diário Oficial [government gazette] on September 14, 1930.

Another activity developed by the DHIE was the examination of schoolchildren, which occurred with a lack of staff resources. Only two physicians and five nurses were responsible for all the work. The students were evaluated for nutrition, the presence of skin and scalp diseases, dental caries, syphilis, tuberculosis, tonsillar hypertrophy and adenoids, eye, ear, respiratory and circulatory diseases (GESTEIRA, 1931). Occasionally, investigations of various kinds took place, such as the infant mortality survey, which was conducted on the premises of the Directorate with independent staff under the determination of the League of Nations.

The investigation took place in two districts: an urban one (formed by Sé and Rua do Paço) and a rural one (constituted by the 1st and 2nd districts of Pirajá and Paripe), whose choice was approved by the Comitê de Higiene da Liga Internacional [Hygiene Committee of the International League] (BARRETO, 1929). The implementation of the investigation put under surveillance all newborns and infants up to one year of age, apart from the establishment of monitoring of cemeteries in an attempt to prevent clandestine burials. According to Barros Barreto (1929), 840 children were monitored in

the urban district, with 10,845 visits. In the rural district, 954 children were monitored and received 15,628 visits.

The investigation failed to conduct necropsies and Wasserman tests on a significant number of cases involving 60 deaths of children under one year of age and 30 stillbirths in the urban district. Similarly, there were 109 deaths of children under one year of age and 40 stillbirths in the rural district. Despite this, the Secretary of Health and Public Assistance of Bahia claimed that João de Barros Barreto, who served both as the director of the DNSP and the assistant in charge of the investigation in Brazil, conducted more rigorous and comprehensive examination in Bahia than those carried out in São Paulo and Rio de Janeiro (BARRETO, 1929). According to Batista (2019a), João de Barros Barreto belonged to the same Pernambuco family lineage as Antônio de Barros Barreto. They built a similar professional trajectory in the first half of the 20th century and published a text in coauthorship, recoverable from the *Anais do Primeiro Congresso Brasileiro de Higiene* [Annals of the First Brazilian Congress of Hygiene].

Regarding the actions of the DHIE, since the beginning of its activity, the directorate decided to send to the families a bulletin indicating the problems found during the inspection of the students, with the intention that their guardians would help to reduce the issues in child hygiene. The DHIE also issued a special bulletin congratulating those who collaborated with the directorate (GESTEIRA, 1931, p. 7). Children who failed to comply with the DHIE recommendations, even after home visits by nurses, were referred to the School Dispensary, which aimed to help poor students by providing ophthalmological, otorhinolaryngological, dental clinic services, and others.

In the sense of understanding the potential impact of these demands on the population of Salvador, it is crucial to analyze the class and racial-ethnic composition of the children and women assisted by the DHIE's services and their living conditions. According to Barros Barreto's 1928 report (published in 1929), of the 776 pregnant women registered at the prenatal dispensaries in Salvador that year, 82 were white, 365 black, and 388 brown; they were 36 cooks, 38 seamstresses, six housemaids, 638 homemakers, one nurse, nine ironers, 38 laundresses, one merchant, six laborers, and three teachers (BARRETO, 1929, p. 130). The following year's register included 100 white women, 200 black women, and 354 brown women; they were 30 seamstresses, 20 cooks, 40 laundresses, ten laborers, and 554 women of unknown occupation (BARRETO, 1930, p. 127).

Based on these data, it is possible to affirm that most of the pregnant women assisted by the DHIE were black or brown<sup>2</sup>, with occupations that ensured low purchasing power. For Alberto Heráclito Ferreira Filho (2003, p. 21), the abolition of slavery and the advent of the Republic brought little change to the lives of poor Bahian women

<sup>&</sup>lt;sup>2</sup> Due to the complex ethnic-racial formation of the Bahian population throughout the historical process, women declared as brown could be considered black women in Salvador.

until the 1940s. The occupations assigned to these women were, in many ways, similar to those of slaves and *forras* [freedwomen] since the division of labor still excluded 83.90% of women from the formal labor market in 1929, forcing them, according to statistical data, into "domestic" or "undefined" occupations, as well as into the "undeclared professions or as non-working women".

The number of poor schoolchildren attended by the DHIE, children of women who fit the profile presented, was 562, with 535 prescriptions issued since the creation of the School Dispensary attached to the DHIE (GESTEIRA, 1931, p. 8). These children lived in terrible housing conditions, had no piped water, and ate a poor diet, which facilitated the spread of disease, especially in the peripheral districts and workers' villages (BATISTA, 2020c).

It was difficult to comply with the doctors' demands regarding child hygiene, not because of the "ignorance" of mothers and children, but because of the material difficulties and lack of dignified living conditions, in a society marked by the struggles faced by Afro-Brazilians and their descendants. The discourses of the magazines analyzed by Freire (2008, p. 161, translated by the author), which ascribed to women a new social role, that of the modern mother, with the function of educating her children – "[...] provided with the scientific arsenal of childcare, based on the supremacy of reason over emotion, and breaking with 'old' religious dogmas or traditional beliefs" – would have great difficulty in being effective.

Finally, the 1929 and 1931 reports produced by DHIE indicate that little educational actions – a highlight in medical-sanitary traditions from different countries and proposed in the Sanitary Reform of Bahia as a means of social improvement – took place beyond explanations by doctors and nurses to the examined children, which occurred due to a lack of personnel (GESTEIRA, 1929, 1931). In January 1928, at the request of the Director of Education [Director da Instrução], a series of conferences were held for women teachers in the Bahia countryside:

CHART 3 – PROGRAM OF CONFERENCES GIVEN TO TEACHERS FROM THE BAHIA COUNTRYSIDE

Topic	Speaker
Health as an educational goal. Importance of physical education and hygiene of education	Dr. Claudelino Sepulveda
General school hygiene. Nutrition. Work and recess.	Dr. Manuel Cordeiro de Almeida
Grooming. Examination and care of the skin and the scalp.	Dr. Helio Ribeiro (Child Hygiene Inspectorate)
Examination of the auditory system. Common diseases of the auditory system in schoolchildren. Hearing hygiene.	Dr. Colombo Spínola
Examination of the mouth and teeth. Importance and basic care	Dentista Lopes Pontes
Prophylaxis of infectious diseases in schools	Dr. Alvaro da Franca Rocha (Child Hygiene Inspectorate)
Eye Examination. Common eye diseases in schoolchildren. Eye Hygiene.	Dr. Colombo Spínola
The school body. Care for its development.	Dr. Claudelino Sepulveda
Prophylaxis of physical defects of school origin	Dr. Manuel Cordeiro de Almeida
Examination of the nose and throat. Importance of the amygdales in schoolchildren	Dr. Colombo Spínola
School hygiene and its objectives. Action program.	Prof. Dr. Martagão Gesteira
The primary teacher - health teacher	Prof. Dr. Martagão Gesteira

SOURCE: Gesteira (1929).

In 1930, the *Escola de Mãezinhas* [Mommies School] was run by health educator Carmina Portella. The course ran regularly and was attended by 42 female students from the primary school, 30 of whom attended all the modules. The course taught the basics of caring for children and newborns. It is worth mentioning that other Brazilian states also adopted this model of women's education. According to Márcia Guedes (2017, p. 1455), since 1926, the precepts of childcare were disseminated by school health educators in the fourth year of primary school in São Paulo through the *Escola de Mãezinhas* program.

## **Closing Remarks**

The Bahia DHIE was an SSAP agency that worked to improve the lives of schoolchildren. The agency emerged amid the transformations proposed by the Sanitary Reform of the 1920s, a process of progressive expansion of state action. Its founder, Antônio de Barros Barreto, achieved relative professional and financial autonomy by creating a structure directly subordinated to the governor and also promulgated the Bahia's Health Code in 1925, which made it possible to send commissions to states and countries considered as a reference in health issues. School hygiene was one of these issues.

The State of Bahia's hygiene proposals were based on health education. The knowledge in this field, which circulated in the United States, Europe, and Brazil, was also produced and shared by students and professors of the FMB, as well as by members of the state staff, such as doctors Martagão Gesteira, Colombo Spínola, and Álvaro Bahia.

The actions conducted by these individuals and by the team of physicians and nurses who worked in the schools and the School Dispensary attached to DHIE included the following: inspection of the institutions, verification of physical conditions of the premises, and examination of school children, by providing ophthalmological, otorhinolaryngological, and dental services to poor children.

Lastly, the Health Education guidelines for School Hygiene demanded certain habits from families. However, these habits were often difficult to adopt in the terrible housing, food, and living conditions that the black and poor population of Salvador endured. Understanding this issue is crucial to problematizing the places of discourse production of the doctors and health professionals in the early 20th century. Such discourses were distant from the population to which they directed their sanitary projects. Furthermore, they constantly classified this population as "ignorant" and "uncivilized".

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