

Paula Araujo Opromolla<sup>1</sup>Ruy Laurenti<sup>II</sup>

# Hansen's disease control in the State of São Paulo: a historical analysis

---

## ABSTRACT

Leprosy is an infectious contagious disease known since Biblical times. Global effort for disease control reveals intricate convergences of national history and of medical, governmental, and international policies. The study describes the history of Hansen's disease and control actions undertaken in the state of São Paulo starting in the 19th century and its connection with the development of public health in that state, by means of a bibliographic and documental analysis.

**DESCRIPTORS:** Leprosy, prevention & control. Communicable Disease Control, history. Epidemiologic Surveillance, history. Review.

---

## INTRODUCTION

Multidrug therapy (MDT), introduced as standard treatment for leprosy in 1981,<sup>29</sup> was responsible for reducing the global burden of disease in the last two decades. Nevertheless, new cases continue to emerge in endemic countries and leprosy is still the leading cause of permanent disability among infectious contagious diseases.<sup>a</sup> Prevention and surveillance are thus still needed to monitor and deal with relapses, possible drug resistance and even the resurgence of new cases.

There are regions in Brazil where new case detection is still increasing, as the Central Western, Northern and Northeastern regions.<sup>10,11,13,20</sup>

The overall scope of the fight against leprosy and the complexity of the issues it raises is impressive, showing intricate convergences of national history, and of medical, governmental, and international policies.<sup>24</sup>

The history of the fight against leprosy in São Paulo was unique,<sup>b</sup> as is the whole sanitary movement it was part of, uncommon in global health history, both in the way it developed and the pace in which it was implemented. The campaign was similar, in some aspects, to the health policy developed by Bismarck in Germany.<sup>2</sup>

Faced with these issues, this article aimed to describe the history and actions to control leprosy in São Paulo, starting on the early nineteenth century, and its connection with the establishment and development of public health in the state. Based on the landmark discovery of the effective treatment of leprosy,

<sup>1</sup> Secretaria de Estado da Saúde de São Paulo. São Paulo, SP, Brasil

<sup>II</sup> Departamento de Epidemiologia. Faculdade de Saúde Pública. Universidade de São Paulo. São Paulo, SP, Brasil

### Correspondence:

Paula Araujo Opromolla  
Av. Dr. Arnaldo, 351; 6º andar, sala 618  
Cerqueira Cesar  
01246-902 São Paulo, SP, Brasil  
E-mail: opromolla@saude.sp.gov.br

Received: 11/6/2009  
Approved: 6/27/2010

Article available from: [www.scielo.br/rsp](http://www.scielo.br/rsp)

<sup>a</sup> World Health Organization. Report of the global forum on elimination of leprosy as a public health problem [Internet]. Geneva; 2006. [cited 2007 May 1]. Available from: [http://whqlibdoc.who.int/hq/2006/WHO\\_CDS\\_NTD\\_2006.4\\_eng.pdf](http://whqlibdoc.who.int/hq/2006/WHO_CDS_NTD_2006.4_eng.pdf)

<sup>b</sup> Monteiro YN. Da maldição divina à exclusão social: um estudo da hanseníase em São Paulo [Doctoral thesis]. São Paulo: Faculdade de Filosofia, Letras e Ciências Humanas da USP; 1995.

sulfone, the period was divided into pre-sulfone, sulfone and multidrug therapy (MDT). The information presented here is based on a non-exhaustive literature and document review of official reports, books, theses, and journals in the field of public health, medical history, especially that of leprosy, mainly in the state of São Paulo.

## PRE-SULFONE ERA

Known since Biblical times, leprosy is recorded many times in texts from 500 BC in India, where it is still prevalent, and in Southeast Asia, China and African countries.<sup>3,17,28</sup> The first cases of leprosy in Europe may have been brought by the troops of Alexander the Great, around the year 300 BC. In the Middle Ages, the disease reached high levels in European countries, probably due to the influx of leprosy sufferers during the Crusades. By the fifteenth century, there was a decrease in the number of infections in most of Europe and one of the last leprosy houses, of the many formerly existing, was closed in 1772 in England. Even so, in the seventeenth century there were still some outbreaks of the disease in Spain, Portugal, Italy, Greece and Russia.<sup>3,28</sup>

In the mid-sixteenth century, leprosy was brought to America by European immigrants and later also by the African slaves.<sup>16</sup>

The first document confirming the presence of the disease in Brazil dates from December 4, 1697, in which the Board of Rio de Janeiro asks Portugal to install a leprosy house in the Church of the Conception, given the large number of leprosy sufferers in the city.<sup>c</sup>

### Leprosy in the State of São Paulo

São Paulo was considered a “unique and special case”, a “communications node” and “transition zone”, an early occupation and, for the same reasons, stagnant and decadent until the late eighteenth century, probably because of the difficult access resulting from its geographical location. During this period, the establishment of sugarcane plantations focused on trade with the Portuguese kingdom brought about a period of prosperity and documents begin to appear regarding leprosy sufferers in the region.<sup>16,23</sup>

In 1820, the first census of the Captaincy of São Paulo reported 538 cases in 24 villages of the captaincy, particularly in the Vale do Paraíba region.<sup>16</sup> São Paulo became a province in 1821 and Paraná was part of its territory until 1853 (Figure 1).

That first census was followed by those of 1851 (849 cases), 1874 (466 cases) and 1887 (373 cases). Figure 1 shows an increase of areas affected by the disease, coinciding with this region's large agricultural development and the influx of European immigrants coming to São Paulo. According to Maurano<sup>16</sup> (1939), from 1865 to 1885, the Province of São Paulo was “crossed by railroads, required by the continuous development of coffee agriculture.” These population movements may have contributed to the spread of leprosy in the region, linking the growth of affected areas with the colonization process in the state.

In the early 1900s, São Paulo authorities were concerned about the influx of immigrants from endemic regions. It was estimated that in 1907, there were approximately 2,000 cases in the state.<sup>15</sup>

From the beginning of the Republic in 1889 until late 1917, health actions in São Paulo were based mainly on the work of the sanitary police, and on campaigns and public health research.<sup>d</sup> The prophylaxis of leprosy in the state had no organized plan and no office in charge of it. Only from December 1917, with Law 1,582, actions to fight the disease began to take place in an organized fashion; until then, some municipalities had leprosy houses (practically repositories of patients) subsidized by the state government.<sup>16</sup>

In late 1919, President Epitácio Pessoa called on Congress for the creation and organization of the National Department of Public Health (DNSP). This was a result of the vision of Belisario Penna<sup>22</sup> on the relationship between illness, politics and society in Brazil and the role of the federal government in conducting policies of sanitation and public health. Thus began the centralized model of leprosy treatment.<sup>9</sup>

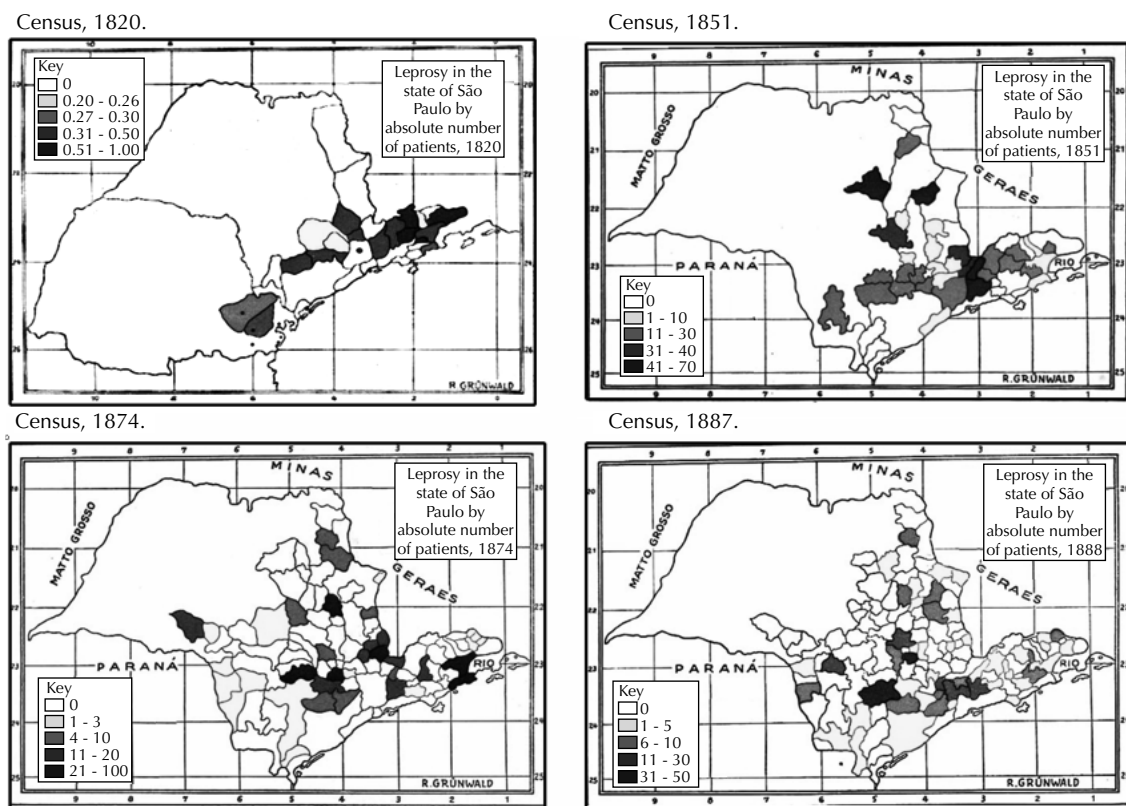
The American Conference on Leprosy in 1922 decided for the isolation of leprosy patients, as advocated in Europe since 1897,<sup>e</sup> which, in Brazil, culminated in the publication of Federal Decree No. 16,300 of 31 December 1923, providing for the isolation of patients.<sup>25</sup>

During that period, São Paulo held censuses of patients with the following results: in 1923, 4,115; in 1925, 9,000; in 1926, 10,640; in 1927, 8,000 to 10,000, considering only patients with full name and known abode. With this backdrop, the Leprosy Prophylaxis Inspectorate was created in 1925, the first state public agency specializing in leprosy.<sup>15,16</sup> In December 1929, the construction of sanatoria and hospitals for the “sufferers of class” was determined and the organization of the Leprosy Prophylaxis Inspectorate expanded.

<sup>c</sup> Souza Campos N. História da endemia leprótica em São Paulo. São Paulo; 1942.

<sup>d</sup> Mascarenhas RS. Contribuição para o estudo da administração sanitária estadual em São Paulo [Associate professor thesis]. São Paulo: Faculdade de Saúde Pública da USP; 1949.

<sup>e</sup> I Conferência sobre Lepra, Berlim, Alemanha, 1897.



Source: Maurano<sup>16</sup>

**Figure 1.** Cases in the state of São Paulo, according to the 1820, 1851, 1874, and 1887 leprosy censuses.

In the early 1930s, changes in guidelines for economic policy had repercussions in São Paulo. Modernization and the resumption of industrialization reflected in the creation of research and technology institutions that formed the foundation for progress within the state. Nevertheless, during this period, there was no statewide general plan for public health, but instead several specialized plans, with increased activities within specific sectors such as leprosy.

The Leprosy Prophylaxis Inspectorate had, in 1931, the following organization (Figure 2):

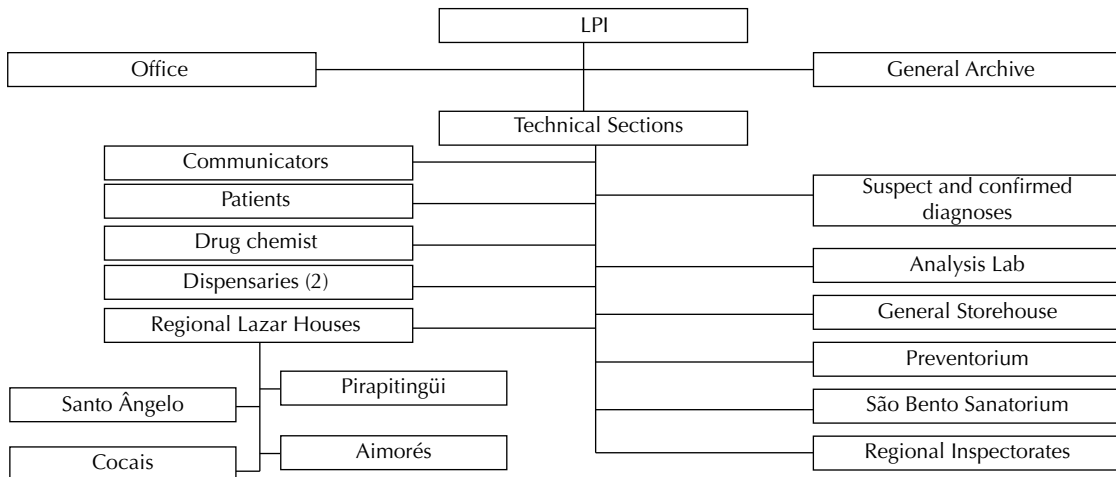
Thusly organized, the Central Office closely monitored the situation of leprosy in São Paulo. The service was managed by a chief inspector subordinate to the General Director of Health Services. This management extended to all leprosy homes in the state, clinics, prevention centers and regional inspectorates. This work was aided by an assistant inspector, who accumulated with this function that of physician in the Medical Diagnostic Elucidation Section. The Chief Inspector controlled the movement of all leprosy homes through daily bulletins about admissions, escapes, deaths and events, and by weekly bulletins on general and specific treatment

issues, such as expenses with medication, supplies to the homes and buildings, among others. The Chief Inspector had, ultimately, absolute control of all sections, services and information relating to patients.<sup>26</sup>

The Inspectorate archive was organized so as to be able to provide any information about a case or person examined at any of the sections of the Service. This general archive held plug-cards in various colors, indicating whether the patient was suspected, negative or a carrier. Besides containing the general record of the subjects examined, there was, for patients, an index of place of residence. This was done on a street-by-street basis for the capital and by city for the countryside. A focus index was also created under the same conditions, with signs affixed on the edge of the sheet to indicate whether the person was hospitalized or had died.<sup>26</sup>

State Decree No. 7,070 of 06/04/1935, transformed the Leprosy Prophylaxis Inspectorate into a department directly linked to the Health Office, thus becoming the Department of Leprosy Prophylaxis (DLP). All information about the patients began to be centralized in that organ.<sup>d,f</sup>

<sup>f</sup> Nemes MIB. A hanseníase e as práticas sanitárias em São Paulo: 10 anos de sub-programa de controle da hanseníase na Secretaria de Estado da Saúde (1977-1987) [Master's dissertation]. São Paulo: Faculdade de Medicina da USP; 1989.



Source: State Decree 4.891, de 13 de fev. de 1931 — Reorganiza o Serviço Sanitário do Estado. Art. 85 — Da Inspetoria de Profilaxia da Lepra

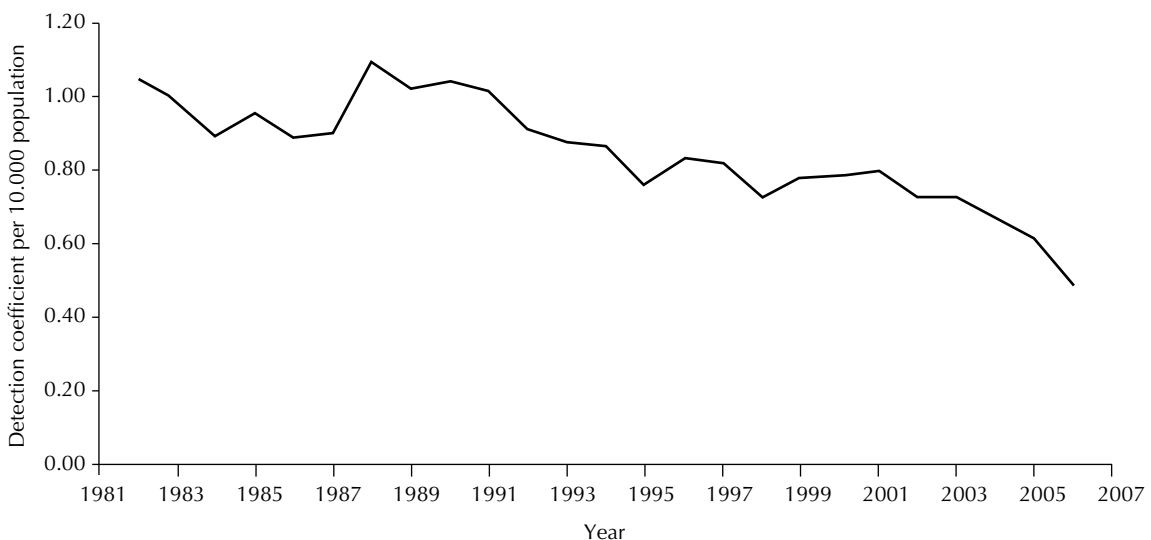
**Figure 2.** Organization chart of the Leprosy Prophylaxis Inspectorate, 1931.

In the late 1930s, this strongly isolationist model and its prophylactic service was consolidated, and in scientific circles, São Paulo was considered a center of excellence in leprology. Professionals from different countries would come to São Paulo to learn about the program, and leprologists from São Paulo were often invited to provide advice to the medical services in other countries, particularly those of Latin America.<sup>18</sup>

In 1941, the I National Health Conference had as one of its central themes the fight against leprosy. That same year, on April 2, Decree-Law No. 3,171 reorganized the National Department of Health within the Ministry

of Education and Health. The 1942 chart shows that this department's structure is geared toward specific diseases, at the time organized by the national services: yellow fever, malaria (to which were subordinated the prophylactic measures against Chagas' disease and schistosomiasis), cancer, tuberculosis, leprosy and mental illnesses. In this context, the National Leprosy Service (NLS) was created as an office for technical guidance, coordination and control of leprosy-related public and private actions.<sup>25</sup>

This vertical structure, organized by disease, is characteristic of the history of public health in Brazil and would remain in place for years.<sup>12</sup>



Source: Divisão Técnica de Vigilância Epidemiológica em Hanseníase, Centro de Vigilância Epidemiológica "Alexandre Vranjac" – SES-SP, 2007

**Figure 3.** Leprosy detection coefficient, 1981-2006.

The diagnosis of leprosy was an important matter for the patient isolation policy; physicians were responsible for diagnosing all individuals. They were the ones confirming the cases or not, basing their diagnostic on predefined signs and symptoms of the disease, along with the positive smear tests. The State carried out the epidemiological diagnosis from positive cases of leprosy, made public through the censuses. When the size of the problem was confirmed by this epidemiological diagnosis, the state decided on the isolation of patients, as provided by the existing legislation in the period.<sup>g</sup>

The institutions for isolation were generally created or maintained by the government. In São Paulo, only physicians from the DPL were allowed to treat leprosy patients after positive diagnosis. Physicians who were not from the DPL did not have such permission, and also were furthermore punishable if they carried out diagnosis or treatment of leprosy patients. This policy was adopted in the State of São Paulo so that information on all leprosy patients in the state could be stored in a single archive.<sup>18g</sup> Physicians in São Paulo were forced by law to notify the DPL of leprosy cases. Citizens could also anonymously tip the authorities and the DPL was in charge of “hunting” these patients and isolating them in asylum colonies.<sup>b</sup>

## SULFONE ERA

Faget presented in 1943 the results obtained with disubstituted sulfone (Promin), which then became the basic treatment for the disease.<sup>5</sup>

In Brazil, sulfones began to be used in 1944 on patients from the Padre Bento asylum colony in Guarulhos, SP.<sup>4,27</sup> In April 1948, the 5th International Leprosy Congress in Havana, Cuba, initiated discussions on compulsory admissions, patient discharge and transfer for treatment in clinics, due to the promising results of treatment with the sulfone.

However, until January 1950, with Federal Law 1,045 of 02.01.1950, which regulated the granting of discharge to leprosy patients, and with Ordinance No. 11 of 03/08/1950 by the National Leprosy Service, which regulated this law, the NLS failed to change its orientation, maintaining the isolation of leprosy patients as a public health policy.<sup>25</sup>

In 1953, the Ministry of Education and Health was dismembered,<sup>h</sup> thus creating the Ministry of Health. The separation of health and education led to greater

independence and autonomy in relation to national health policies. No major changes were added to those previously implemented, and the National Services remained in operation. In 1956, the National Department of Rural Endemic Diseases, part of the National Department of Health was created and the structure built during the Brazilian New State of 1937-1935 underwent mergers or suppressions of some its national services.

Authorities at the 6th International Leprosy Congress, held in Madrid in 1953, argued that isolation should be selective and advocated for advertising and health education measures in order to prevent contagion.<sup>i</sup> Repeal of exclusion laws, especially isolation, was strong at the 7th International Leprosy Congress held in Tokyo in 1958. Isolation was defined as an anachronistic measure, with no impact on treatment and insufficient to cure or mitigate disease advances. For the first time, drugs were prioritized as a basic measure of prevention of leprosy in Brazil and in that same year, researchers, including Ernani Agrícola, began advocating the end of compulsory isolation of patients.

The end of mandatory isolation of patients in Brazil occurred in 1962 through a federal decree.<sup>j</sup> However, in São Paulo, with the justification that “a decree could not revoke a law (Law No. 610 dated back to 1949 and fixed the norms of leprosy prophylaxis in which isolation appeared as a measure to be implemented in all infectious patients and those who constituted a threat to the healthy population, their conditions, lifestyle, and for refusal to submit to health measures)”, still in force, the DPL continued to admit patients until 1967, as shown in the words of Prof. Abraão Rotberg:<sup>b</sup>

*“The state of São Paulo simply did not hear the Federal Service regarding the legislation. It did not meet decree 968 and continued to isolate in full swing, violently so. Not even selective isolation was observed... They simply could not make São Paulo obey”.*

The administrative Reform of the São Paulo State Department of Health,<sup>k</sup> in 1969 was based on guidelines for integrated services at the local level, executive regionalization and normative centralization of health actions. This reform abolished the DPL and created the Division of Leprosy and Sanitary Dermatology, linked to the Institute of Health. The Division was in charge of the technical area, thus replacing the Technical Assistant Division of the DPL. The old specialized sanatoria were converted into Sanitary Dermatology

<sup>g</sup> Cunha VS. O isolamento compulsório em questão; políticas de combate à lepra no Brasil (1920-1941) [Master's dissertation]. Rio de Janeiro: Casa de Oswaldo Cruz da FIOCRUZ; 2005.

<sup>h</sup> Brasil. Lei n. 1.920 de 25 de julho de 1953, regulamentada pelo Decreto n. 34.596, de 16/11/1953. Cria o Ministério da Saúde e dá outras providências [Internet] [cited 2007 Jan 5]. Available from: <http://www6.senado.gov.br/legislacao/ListaPublicacoes.action?id=109070>

<sup>i</sup> Asociación Internacional de La Lepra. Memorial Del 6º Congreso Internacional de Leprologia, 1954. Madri, 1953.

<sup>j</sup> Brasil. Conselho de Ministros. Decreto n. 968, de 7 de maio de 1962. Baixa normas técnicas especiais para o combate a lepra no país e dá outras providências. *Diário Oficial Uniao*, 9 maio 1962; Seção I, parte I:5113-5114. Revogado em 1976 pelo decreto n. 77.513 de 29 de março de 1976.

<sup>k</sup> São Paulo. Secretaria da Saúde do Estado. Reforma administrativa: textos legais e regulamentares, 1967/70. São Paulo; 1972.

Hospitals subordinate to the administration of the Hospital Care Coordination for progressive deactivation of leprosy hospitals.<sup>14,1</sup>

Leprosy patient care and greater responsibility for leprosy control were transferred to the network of health units of the Community Health Coordination. In the municipality of São Paulo, ten dispensaries became "Specialized Areas" of Sanitary Dermatology, all located in health units within the statewide network.<sup>6,7,1</sup>

The reform promoted technical and administrative decentralization of the State Department of Health (SDH) and normative centralization, in a central body called the Health Center, of all executive actions, which had been, until then, under the responsibility of 25 specialized services, of "vertical" character, created in the 1930s.<sup>m</sup>

As part of the Mother, Child and Adult Care Program, the State Department of Health developed, in 1976, the São Paulo Leprosy Control Subprogram (LCSP), which proposed "to develop integrated health actions among the population around the area of operation of its various units, aiming at reducing risks of infection and morbidity due to leprosy."<sup>n</sup>

According to Nemes<sup>f</sup> (1989), "losing its former peculiarities, leprosy did, in this moment, come close to the status of a disease like any other."

In 1970° the term "leprosy" and derivative forms were officially abolished from the official terminology of the São Paulo State Department of Health. The measure, proposed by Professor Abraão Rotberg, was corroborated by the then Health Secretary of the State of São Paulo, Dr. Valter Leser, and by the technical committee of that body, which then issued a resolution determining the creation of a new term to classify this disease. Since then, the disease is officially called Hansen's Disease for the São Paulo SDH.<sup>1,8</sup>

In 1975, during the Geisel Government, the Brazilian Ministry of Health adopted the term "Hansen's Disease".<sup>21</sup> Gradually, this new terminology was accepted by other health services, and on March 29,

1995, by Federal Law No. 9,010, Hansen's disease became the mandatory term, replacing "leprosy" in all official documents.<sup>21</sup>

Federal Decree 968 was repealed in 1976 and a report entitled "Hansen's Disease control policy" was regulated by Ordinance No. 165/BSB of 14/05/1976.<sup>p</sup> This rule determined the end of the selective isolation of patients and that care was to be given on a walk-in basis.

In 1978, the State of São Paulo reorganized the control of communicable diseases and deployed the Epidemiological Surveillance System (ESS) after a restructuring on the federal level.<sup>q</sup> With the administrative reform of the SDH-SP in 1985/86, the coordination of ESS at the state level began to be managed by the Center for Epidemiological Surveillance (CES). No new rules or training of personnel for treatment and control of leprosy were established, however.

## MULTIDRUG THERAPY ERA

Nationally, the debate on decentralization of leprosy control in the cities countrywide began in 1985, with the restructuring of the health system. With the priority given to the Hansen's Disease Program of the Ministry of Health through the National Office of Special Health Programs (NOSHP), new strategies were developed, aiming to increase coverage and improve care for leprosy patients. Until then, assistance to this group of afflicted individuals was given in the state health units, installed in some cities.<sup>r</sup>

During the great debates and changes in national health policy, the National Sanitary Dermatology Division developed the "Intervention Projects for 1986-1990." These projects, in view of the health reform, aimed at decentralization and integration of the program within the network of health services, the implementation and systematization of all control actions, according to the complexity of health services, with support of international organizations. The political momentum helped implement/program MDT regimens at health units, according to the proposal put forward by the World Health Organization.<sup>29,s</sup>

<sup>1</sup> Lombardi C. Situação da endemia da hanseníase no município de São Paulo, Brasil (1976-1977) [Master's dissertation]. São Paulo: Faculdade de Saúde Pública da USP; 1978.

<sup>m</sup> Waldman EA. Vigilância epidemiológica como prática de Saúde Pública [Master's dissertation]. São Paulo: Faculdade de Saúde Pública da USP; 1991.

<sup>n</sup> São Paulo. Secretaria da Saúde do Estado. Coordenadoria de Saúde da Comunidade. Subprograma de Controle da Hanseníase. São Paulo; 1976.

<sup>o</sup> São Paulo (Estado). Deliberação SS/CTA nº. 7, de 10 de dezembro de 1970. Terminologia referente à hanseníase. *Diário Oficial Estado São Paulo*. 11 dez 1970.p. 35

<sup>p</sup> Ministério da Saúde. Portaria nº. 165/BSB de 14/05/1976. Estabelece política de controle da hanseníase. *Diário Oficial União*. 11 jun 1976; Seção I:8301. Revogada integralmente pela Portaria n. 498 de 9 de outubro de 1987.

<sup>q</sup> Lei n. 6.259, de 30 de outubro de 1975. Dispõe sobre a organização do Sistema Nacional de Vigilância Epidemiológica, sobre o Programa Nacional de Imunizações, estabelece normas relativas à notificação compulsória de doenças, e dá outras providências. *Diário Oficial União* [Internet]. 31 out 1975.

<sup>r</sup> Moreira TMA. Estudo de caso da avaliação da descentralização das ações programáticas de hanseníase [Doctoral thesis]. Rio de Janeiro: Escola Nacional de Saúde Pública da FIOCRUZ; 2002.

<sup>s</sup> Ministério da Saúde. Secretaria Nacional de Programas Especiais de Saúde. Divisão Nacional de Dermatologia Sanitária. Hansen's disease: gradual setting up multidrug therapy in Brazil. Brasília, DF; 1988.

To assist in the implementation of the São Paulo Unified and Decentralized Health System (UDHS) in 1987, the Center for Support and Development of Integrated Health Actions (CSDIHA) was created, also containing the Special Group Program (SGP) for leprosy. The SGP started developing intense programs that included staff training, review and implementation of standards, drug prevision and control, transference of leprosy control actions to the municipality and participation in the pilot project for gradual deployment of multidrug regimens.<sup>19</sup>

In 1990, the State of São Paulo had 40,420 patients in the active record with the prevalence rate of 11.60 per 10,000 population, the result of many years of accumulation of cases and a very small number of patients cured.<sup>19</sup>

It was only from 1994 onwards, with further structural changes in the SDH-SP and the extinction of the CSDIHA and the SGP, that professionals in leprosy control were transferred to the CES and were able to continue with staff training, review and issuance of technical standards, development and implementation of new technologies created in academia or in operational projects. Continuous consultancy was offered in the process of transferring to the municipality and of consolidating leprosy control in the Unified Health System (SUS) - SP.

From 1981 to 2006 there was a sharp drop in rates of detected leprosy in the state of São Paulo (Figure 3).

Despite the technical and scientific advances and the economic, social and political transformations in Brazilian society, control of leprosy has not been easy.

Currently, decentralized diagnosis and management of complications, including treatment and rehabilitation of disabilities, are the guiding principles for coping and controlling the disease. There is, however, still a considerable number of municipalities in São Paulo that maintain the chain of disease transmission. In 2007, 2,044 new leprosy cases were detected, a detection rate of 0.49 per 10,000 population, 83 cases in children under 15 years (0.8 per 10,000 population).

## FINAL CONSIDERATIONS

Generally speaking, diseases are given more attention by governments when they have greater economic or social impact; thus, due to the burden of prejudices related to the disease, we chose leprosy to describe the history of public health in the State of São Paulo.

Within the field of leprology, in addition the contributions of great leprosy specialists in Rio de Janeiro, a group of researchers of the former DLP of the SDH-SP continued their work even after the termination of the DLP, adding greatly to our understanding of the pathology of leprosy. Between 1930 and 1960, São Paulo witnessed intense scientific activity in the area of leprology that spread to other states and outside Brazil. Dr. Luiz Marino Bechelli, of the Ribeirão Preto - USP School of Medicine was, for a whole decade (1962-1972), responsible for the leprology service at the World Health Organization in Geneva. The use of rifampicin, a semi-synthetic antibiotic of the rifamycins SV group, still the most important pillar of effective leprosy treatment, happened in 1963 with the work of Opromolla.<sup>1</sup>

Currently, leprosy diagnosis and treatment are simple and freely available in health services. Despite the significant reduction of disease burden associated with the prevalence of leprosy, achieved by means of an elaborated strategy and unified efforts, new cases continue to emerge and will to continue to do so for many years or at least in the next few decades.

The greatest challenge is to maintain the quality of leprosy services and to ensure that all people affected by the disease, regardless of where they live, have equal opportunity to be diagnosed and treated by competent health professionals.

The Division of Leprosy of the Epidemiological Surveillance Center "Alexander Vranjac" from the São Paulo State Department of Health, maintains with other states of the Union an information network for surveillance of contacts, activating different epidemiological surveillance teams for the active search of relatives of cases detected in the state. Moreover, since 2001, a biennial census is carried out, reporting on the disabilities presented by leprosy cases under treatment or who have been discharged in the previous three years, but who still require specialized care from the health network.

<sup>1</sup> Opromolla DVA. Primeiros resultados com a "Rifamicina SV" na lepra lepromatosa. In: Congresso Internacional de Leprologia, 8<sup>o</sup>, Rio de Janeiro, 1963. Anais. Rio de Janeiro, Serviço Nacional de Lepra, 1963. v. 2, p. 346-55.

## REFERENCES

1. Bechelli LM. Advances in leprosy control in the last 100 years. *Int J Lepr Other Mycobact Dis*. 1973;41(3):285-97.
2. Blount JA III. A administração da saúde pública no Estado de São Paulo: o Serviço Sanitário, 1892-1918. *Rev Adm Empres*. 1972;12(4):40-8.
3. Dharmendra. Leprosy. Bombay: Kothari Medical Publishing House; 1978.
4. Diniz O. Profilaxia da lepra: evolução e aplicação no Brasil. *Bol Serv Nac Lepra*. 1960;19(1):7-135.
5. Faget GH, Pogge RC, Johansen FA, Dinan JF, Prejean BM, Eccles CG. The promin treatment of leprosy. a progress report. *Int J Lepr Other Mycobact Dis*. 1966;34(3):298-310.
6. Favero W. Integração das tarefas de controle da endemia leprótica nas atividades rotineiras das unidades de saúde. *Bol Div Nac Lepra*. 1974;33(1 - 4):1-2.
7. Favero W. Subsídios para o planejamento e programação das atividades de controle da lepra no Brasil. *Bol Div Nac Lepra*. 1970;29(3-4):47-74.
8. Forgerini E, Rossini C, organizadores. *Mestres da dermatologia paulista*. São Paulo: Editora JSN; 2002.
9. Hochman G. A era do saneamento: as bases da política de saúde pública no Brasil. São Paulo: HUCITEC/ANPOCS; 1998.
10. Ignotti E, Rodrigues AM, Andrade VLG, Valente JG. Aplicação de métodos de estimativas de hanseníase no Estado de Mato Grosso. *Rev Bras Epidemiol*. 2004;7(2):155-66. DOI:10.1590/S1415-790X2004000200005
11. Lapa TM, Albuquerque MFPM, Carvalho MS, Silveira Júnior JC. Análise da demanda de casos de hanseníase aos serviços de saúde através do uso de técnicas de análise espacial. *Cad Saude Publica*. 2006;22(12):2575-83. DOI:10.1590/S0102-311X2006001200008
12. Lima NT. O Brasil e a Organização Pan-Americana da Saúde: uma história em três dimensões. In: Finkelman J, organizador. *Caminhos da saúde pública no Brasil*. Rio de Janeiro: Editora Fiocruz; 2002. p.24-116.
13. Magalhães MCC, Iñiguez Rojas L. Evolución de la endemia de la lepra en Brasil. *Rev Bras Epidemiol*. 2005;8(4):342-55. DOI:10.1590/S1415-790X2005000400003
14. Mascarenhas RS. História da saúde pública no Estado de São Paulo. *Rev Saude Publica*. 2006;40(1):3-19. DOI:10.1590/S0034-89102006000100002
15. Maurano F. Distribuição da lepra no Brasil e em cada uma das suas unidades federadas. In: Serviço Nacional de Lepra. *Tratado de leprologia*. Rio de Janeiro; 1950. v.1, Tomo I. p.33-55.
16. Maurano F. História da lepra em São Paulo. São Paulo: Editora Revista dos Tribunais; 1939.
17. Monot M, Honoré N, Garnier T, Araoz R, Coppée JY, Lacroix C, et al. On the origin of leprosy. *Science*. 2005;308(5724):1040-2. DOI:10.1126/science/1109759
18. Monteiro YN. Prophylaxis and exclusion: compulsory isolation of Hansen's disease patients in São Paulo. *Hist Cienc Saude Manguinhos*. 2003;10 Suppl 1:95-121. DOI:10.1590/S0104-59702003000400005
19. Nogueira W. O Programa de Controle da Hanseníase e os 15 anos do Centro de Vigilância Epidemiológica Prof. Alexandre Vranjac. *Bol Inform CVE*. 2002; edição comemorativa. p. 32-5.
20. Opromolla PA, Dalben I, Cardim M. Análise geoestatística dos casos de hanseníase no Estado de São Paulo, 1992-2002. *Rev Saude Publica*. 2006;40(5):907-13. DOI:10.1590/S0034-89102006000600022
21. Opromolla PA, Martelli ACC. A terminologia relativa à hanseníase. *An Bras Dermatol*. 2005;80(3):293-4. DOI:10.1590/S0365-05962005000300011
22. Penna B. Saneamento do Brasil. Rio de Janeiro: Revista dos Tribunais; 1918.
23. Prado Jr C. Formação do Brasil contemporâneo: Colônia. 23. ed. São Paulo: Brasiliense; 1994.
24. Robertson, J. Editor's note. *Hist Cienc Saude Manguinhos*. 2003;10 Suppl 1. DOI:10.1590/S0104-59702003000400001
25. Rodrigues BA. Fundamentos de administração sanitária. Rio de Janeiro: Freitas Bastos; 1967.
26. Souza Campos N. A campanha contra a lepra no Estado de São Paulo. *Bol Oficina Sanit Panam*. 1934;13(5):480-92.
27. Talhari S, Neves RG. Hanseníase. 3. ed. Manaus: Gráfica Tropical; 1997.
28. Trautman JR. The history of leprosy. In: Hastings RC, organizer. *Leprosy*. 2. ed. London: Churchill; 1994. p.11-25.
29. World Health Organization. Study Group Chemotherapy of Leprosy for Control Programme. Report. Geneva; 1982. (WHO Technical Reports Series, 675).

---

Article based on the doctoral dissertation of Opromolla PA, presented to the Faculdade de Saúde Pública da Universidade de São Paulo in 2007.

The authors declare that there are no conflicts of interest