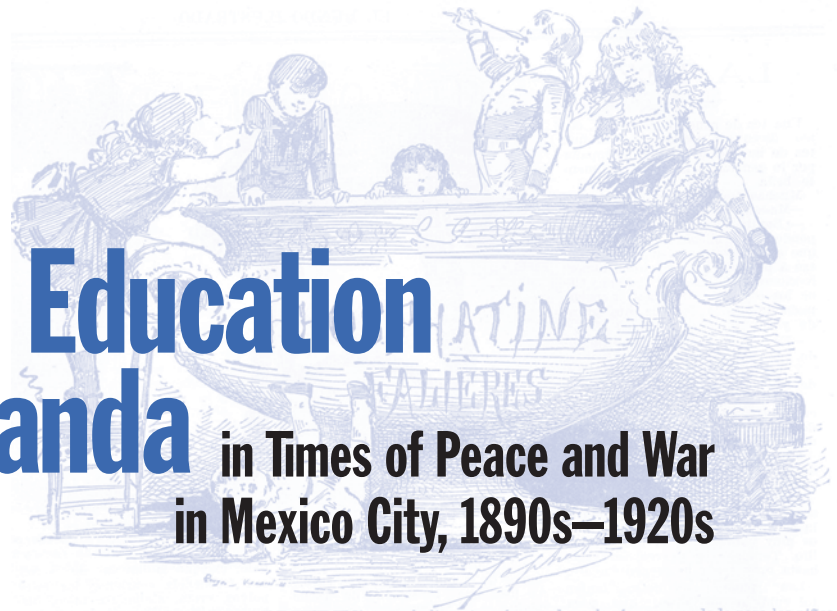


Popular Health Education and Propaganda

in Times of Peace and War in Mexico City, 1890s–1920s



LA "FOSFATINA FALIERES" es el alimento más grande y el más recomendado para los niños desde la edad de seis á siete meses, y particularmente en el momento del destete y durante el período del crecimiento. Facilita mucho la dentición; asegura la buena formación e los huesos; previene y neutraliza los defectos que suelen presentarse al crecer, é impide la diarrea que es tan frecuente en los niños. —PARIS 6. AVENUE VICTORIA. Y EN TODAS LAS FARMACIAS.

Health education and propaganda acquired importance during the late 19th and early 20th centuries in Mexico City, as physicians, hygienists, and schoolteachers attempted to teach the principles of public health to a culturally and socially heterogeneous urban population.

I explore the organization of the Popular Hygiene Exhibition of 1910 and the importance of health education before and after the armed phase of the Mexican Revolution, and why children and the indigenous populations became the main recipients of health education programs. (*Am J Public Health*. 2006;96:52–61. doi:10.2105/AJPH.2004.044388)

Claudia Agostoni, PhD

FROM THE 1890S TO THE 1920S, various sectors of Mexican society responded to the need to raise popular awareness of disease outbreaks and to foster knowledge of disease transmission and prevention. During this 30-year period, the country experienced profound and far-reaching transformations: the apogee, crisis, and downfall of the long Porfirio Díaz regime (1876–1911; also called the Porfiriato); the armed phase of the Mexican Revolution (1910–1920); and the first decade of national reconstruction, when the postrevolutionary governments stressed that political unification and social and economic consolidation were essential requirements for the future of the country.¹ Despite the many differences between the 3 periods

covered in this article, one of the underlying motives and purposes of health education from the Porfiriato into the revolutionary years was a shared belief among state and public health officials that only through the popularization of health education would it be possible to transform the urban and rural populations into a modern, healthy, and industrious citizenry.

Some historians of medicine and public health have recently begun to study the importance that health education acquired in Mexico during the period examined in this article. Ana María Carrillo established that the consensus of opinion among health officials, physicians, hygienists, and schoolteachers during the Porfiriato—and in particular after 1882, when the first Hygienic

Pedagogic Congress was held in Mexico City—was that health education was crucial for the progress of the country, and that only health education would help to prevent the transmission of communicable diseases.² In a similar vein, Patience A. Schell, in examining the relevance that health education acquired during the Porfirian and revolutionary governments of Mexico City, established that discursively and symbolically the “healthy” child became a sign of the nation’s potential.³ On the other hand, Alexandra Minna Stern, who studied the convergence of health education for women and children with the emergence of the eugenics movement in Mexico during the 1920s and 1930s, stressed that eugenicists and physicians

participated in the creation of a new paternal order focused on motherhood, sexuality, child welfare, and health education.⁴

One of the most important transformations of the health education campaigns from the 1890s to the 1920s was that they gradually ceased to concentrate solely in urban environments—notably Mexico City, which became the showcase of the Porfirio Díaz regime—and that health education became intimately linked to the social renovation and state consolidation that characterized the country after the armed phase of the Mexican Revolution. However, because health education campaigns responded to diverse purposes and prompted the interest of different actors, I also examine the different ways in which the press, the lay journal, and the Popular Hygiene Exhibition of 1910 displayed, represented, and embraced the importance that health education acquired during the period under consideration.

During the late Porfiriato, health education—and in particular that aimed at the poorer sectors of society—was regarded as crucial for the image of Mexico City’s “order and progress” that the regime wanted to display to Mexican nationals and foreigners alike. To the Porfiriato’s elite, this meant removing any sign of traditional cultures and impoverished groups—such as Indians and poor immigrants—from the capital’s modern and hygienic areas. Furthermore, rich and poor were not to mingle; if they did, the urban poor should first learn the basic rules of personal hygiene, as well as the correct use of streets and other public areas, be it through education, legislation—as established in the

1891 Sanitary Code—or force. To this end, a number of health education campaigns were organized in the capital. The 1910 Popular Hygiene Exhibition, which will be examined in this article, was particularly prominent.

After the downfall of Porfirio Díaz (1911), and during the violent years of the armed phase of the Mexican Revolution, the inhabitants of Mexico City were besieged by unemployment,

first state-led mass health educational programs were organized. These programs were considered crucial for the social renovation and state consolidation of the postrevolutionary governments. During the 1920s, therefore, health education became key to the efforts of the government to sanitize and modernize the Mexican people and to install upon society a new moral order.



Children advertise the rules of health for combating typhus (Mexico City, ca. 1921). From de los Reyes.⁵²

lack of food, disease, and death. However, health education and propaganda remained high on the agenda of both military and civilian authorities. Some prominent public health officials even believed that only through the establishment of a “sanitary dictatorship” would it be possible to effectively propagate the principles of public and private hygiene among Mexico’s urban and rural populations. A sanitary dictatorship was not implemented, but in the 1920s the

PUBLIC HEALTH AND HEALTH EDUCATION IN LATE-19TH-CENTURY MEXICO CITY

In 1910, during the centennial celebrations of Mexico’s independence, the Superior Board of Health and the Ministry of the Interior organized the Popular Hygiene Exhibition. Government officials and the medical community regarded the exhibition as the culmination of the efforts and goals of the Porfirio Díaz regime,

as well as visible and tangible proof of how important it was for the future of the country that the principles and precepts of hygiene be taught. The exhibition had 2 main objectives: to present a synthesis of the nation's accomplishments in the fields of sanitation, health legislation, and medical innovation since 1810 and to make as widely accessible as possible direct, simple, and essential health education to all its visitors.

During the course of the 19th century, and in particular after 1867, education came to be regarded as an instrument that would transform society and make all Mexicans hard-working and responsible citizens.⁵ Elementary school became obligatory and tuition free in the public school system of Mexico City, and various laws established or reformed existing professional schools in law, engineering, fine arts, medicine, and pharmacy, among others.⁶ In addition, between 1872 and 1910, the number of schools throughout the

country increased from 4492 to 9292. During this period, however, the proportion of the population that could read and write increased only from 14.39% to 19.74%.⁷ Literacy was higher in the main cities (40% in Mexico City and Puebla, 34% in Veracruz) than in rural areas, where it averaged about 7%; moreover, it could vary greatly from one community to another, even within the same state or city. In addition, the linguistic differences and the cultural heterogeneity of the country, as well as the lack of financial and political stability throughout most of the 19th century, were among the main challenges all education programs faced, including health education campaigns.

Health education and prevention campaigns received a considerable boost after the enactment of the first Sanitary Code of the United States of Mexico in 1891. This legal document represented the country's first comprehensive effort to prevent the propagation

of communicable diseases through regulation of the sanitary conditions at all ports and borders. The code demonstrated how important public health had become to the government. However, the sanitary code specified that the various states of the republic had a constitutional right to adopt this legislation or to create their own. The country thus lacked a national system of public health, coordinated and directed by the federal government, whereby the local health departments would be answerable to a ministry of health.

The importance that Mexico City had for the Porfirio Díaz regime was manifested in the sanitary code, which devoted an entire volume to the "sanitary administration" of the capital. It detailed the measures that had to be taken in the construction of homes, theaters, and any other places where people gathered; the sanitary conditions that should prevail in the production and commercialization of food and beverages; and the hygienic standards that should be present in schools, factories, industries, streets, plazas, and open air markets, among many other issues. The code also specified that the Superior Board of Health had to keep detailed statistical reports of all transmissible diseases and make sure that children were vaccinated against smallpox—either voluntarily or by force. In addition, it stated that the health authorities had an obligation to disseminate among the urban population the precepts and principles of public and personal hygiene.

The sanitary administration of Mexico City was emphasized because by 1891 it had become the largest, most populated, and most important political and

Women exercise for health and beauty. From Barros y Buenrostro.⁵³



commercial center of the country, and the Porfirio Díaz government wished to transform it into an ordered, hygienic, and modern capital. The physical and demographic expansion of the city was enhanced by the construction of a communications infrastructure and by internal migration, as people from small towns and villages settled in the capital in search of better living and working conditions.⁸

The city's expansion, however, was neither planned nor supervised, and large areas did not benefit from the construction of a sanitary infrastructure (such as drainage and sewage systems) that the government referred to as "public health works."⁹ The governing elite's perception that the city was prone to epidemics because of the expansion of the city and the influx of immigrants led to the organization of health education campaigns. These endeavors aimed to convey ideals of personal hygiene, disease avoidance, parenting, and conduct through the publication of pamphlets, newspapers, and magazine articles and the organization of lectures and exhibitions for the poorer sectors of society.

THE POPULARIZATION OF HEALTH

The faith placed on health education in the final decades of the 19th century was expressed by physicians, hygienists, schoolteachers, and government officials during the first National Congress of Physicians (1876) and the Hygienic Pedagogic Congress (1882), among others. The opening remarks during the 1882 congress were delivered by physician, Ildefonso Velasco—then president of the Superior Board of Health—who said that a

purely intellectual education that placed no emphasis on the rules of personal hygiene produced weak, lazy, and irresponsible individuals. He insisted that it was not enough to teach men, women, and children how to read and write, but that public and private hygiene and health education had to form part of the curriculum.¹⁰

Another physician, Porfirio Parra, thought that the absence of a hygienic "instinct" among the people made it difficult for licensed practitioners to disseminate the precepts of hygiene.¹¹ According to another president of the Superior Board of Health, Eduardo Liceaga—one of the most important health officials and physicians of late-19th- and early-20th-century Mexico—health legislation had to be proposed and enforced alongside a comprehensive health education campaign.¹² Likewise, physician Manuel S. Iglesias thought that health education and hygienic propaganda should be embraced by teachers of all creeds and professions, and that women and children should be the main recipients of such programs.¹³

During the late Porfiriato, the consensus of opinion was that health education was fundamental to the future and strength of the country, and essential for the modernity and hygiene of the capital.¹⁴ Through articles appearing in books, newspapers, and magazines intended for the general public, several members of the Superior Board of Health and of the National Academy of Medicine undertook the task of disseminating the precepts of hygiene.¹⁵

Over the course of the Porfiriato, the number of journals and newspapers throughout the country increased at an unprecedented

“While political scandals, infamous crimes, and the achievements of the regime received prominent coverage, Mexico’s late 19th-century publications also embraced a clear educational mission, and health advice was present in most of them.”

pace: more than 2579 new journals appeared, 576 of them in the capital.¹⁶ While political scandals, infamous crimes, and the achievements of the regime received prominent coverage, Mexico's late-19th-century publications also embraced a clear educational mission, and health advice was present in most of them. Although widespread literacy was lacking in Mexico City, news, recipes, warnings, and health advice were circulated by word of mouth, informal talks, family reunions, and—most importantly—public readings in markets, plazas, factories, and streets.¹⁷ As the 19th century came to a close, advertisements for health and hygienic products—such as remedies for hidden illnesses, beauty products, capsules to lose weight, and invigorating wines and tonics, produced locally or imported from Europe (particularly France) or the United States—appeared more frequently in the press and in shops.¹⁸

More than through writing, however, health education was promulgated through public lectures and informal talks delivered by licensed physicians and hygienists in markets, plazas, and schools, both urban and rural. The hygiene catechism was preached in a simple, direct, and nontechnical language; the topics covered included child care, physical education, and methods to prevent tuberculosis, venereal diseases, and typhus. The importance that

health education had acquired during the Porfiriato was exemplified in the Popular Hygiene Exhibition, which opened in September 1910.¹⁹

HYGIENE ON DISPLAY

During the Porfiriato, various physicians and hygienists participated in the International Conferences on Hygiene, hosted between 1876 and 1908. These conferences gathered the most committed and renowned public health officials in cities such as London (1884), Paris (1889), and Budapest (1894). In 1909, the Ministry of the Interior and the health authorities decided that the country should host its own hygiene exhibition, to coincide with the 1910 celebration marking the centennial of Mexico's independence.²⁰

The Popular Hygiene Exhibition was organized by the Superior Board of Health and the Ministry of the Interior to present to national and foreign visitors a synthesis of the regime's achievements in urban improvement, sanitation, and public health. The exhibition, however, was also regarded as an educational tool whereby visitors would learn the basic rules of personal hygiene.²¹ In organizing the exhibition, the Ministry of the Interior sent a detailed questionnaire to the sanitation authorities of the federal states. Besides answering the questionnaire, the authorities were asked to provide photographs, drawings, and posters with hygienic maxims and sayings—on tuberculosis and alcoholism in particular—that might be included in the exhibit.²² The Superior Board of Health worked on the production of illustrations, maps, charts, graphs, photographs, and lantern

slides. More than 66 models of hygienic houses with bathrooms, furniture, sewers and drainage were built.

On September 2, 1910, when the Popular Hygiene Exhibition opened to the public, the Catholic newspaper *El País* wrote that it seemed as if the Mexican people were “finally preoccupied by the hygienic problems of the country.”²³ The concerns of the bacteriological age featured prominently in the exhibition. In a lecture delivered by Eduardo Liceaga, a film was shown so that the public could see “the extraordinary activity that germs possess and the prodigious velocity with which they reproduce.”²⁴ Liceaga emphasized that the display of moving images was an essential educational tool that would teach the public—children in particular—how to prevent tuberculosis and other communicable diseases.²⁵ He stressed that the film was not intended to frighten the public, but to show the healthy how to defend themselves against the unhealthy.²⁶

As Nancy Tomes has shown, the popularization of health education was strengthened by the formulation and gradual acceptance of the germ theory of disease.²⁷ One of the effects of germ theory on public health was a renewed emphasis on preventive medicine and the need to control specific diseases. Public health measures, although still concerned with improving the environment, suggested that it was more important to aim at specific germs and individuals rather than at general filth, thus reinforcing the need for community action in controlling disease. Both the medical establishment and public health authorities shared a common interest in preventing disease through popular health

education aimed at specific sectors of the population, in particular schoolchildren, women, and the indigenous populations.

Throughout September and October 1910, the exhibition received 91 019 visitors.²⁸ Of that number, more than 4000 were children: 1800 boys and 3713 girls from the public and private schools of the capital.²⁹ Schoolteachers believed that the message of health education should be transmitted directly to school-aged children; girls in particular—and from a very early age—should learn domestic medicine and personal hygiene. Women also featured prominently among the visitors³⁰; according to the newspaper *El Demócrata*, the feminine contingent was composed not only of “upper-class women, but also of poor women who at last wanted to learn hygiene.”³¹

Because of the exhibition's success, it remained open through November 1910, and its organizers proposed that a Popular Museum of Hygiene be established.³² Plans to transform the exhibition into a permanent museum did not materialize, however, as the end of the centennial celebrations of Mexico's independence coincided with the beginning of the armed phase of the Mexican Revolution.

As mentioned in the first section of this article, health legislation, sanitary reform, and health education were of crucial importance during the Porfiriato. However, the country displayed extremes of wealth and privilege. Mexico was—and remained through most of the 20th century—a predominantly rural country. The contrast between the modes of living of the urban upper classes and those prevalent among the millions of other Mexicans was enormous. Endemic

diseases, lack of proper clothing, unsanitary and badly built shelters, insufficient diet, lack of drinking water, and poor hygienic conditions were among the main challenges that urban and rural health officials faced on a daily basis. The 1910 national census established that more than 50% of all registered houses fell under the category of huts; their dwellers lived in crowded conditions in rooms without internal subdivision, drinking water, sewers, or proper flooring or ventilation.

During the late Porfiriato, various groups had opposing ideas regarding the purpose and role of health education. For the federal government, health education was essential for instilling in the urban population notions of civility, modernity, and citizenship. According to some physicians and hygienists, health education was an essential tool that would help to raise popular awareness of disease outbreaks and knowledge about disease transmission and prevention. In addition, some sectors of the urban population—in particular the wealthier classes—believed that health education was particularly important for providing them with surroundings that were safe from epidemics, and that it was a vehicle that would help mold the behavior of the poorer sectors of society.

MICROBES, BULLETS, AND TYPHUS: HYGIENE AND THE MEXICAN REVOLUTION

During the armed phase of the Mexican Revolution (1910–1920), many rural dwellers fled to the capital in search of a safe haven, only to encounter unemployment,

hunger, chaos, violence, and death. Until 1913, Mexico City had been spared the worst devastation of the revolution, but in February, large areas of the capital were transformed into a battlefield. Thousands of people became homeless, food and water were scarce, and the dead and wounded lay on the plazas and streets. To aggravate the situation, a typhus epidemic spread throughout the city during the second half of 1915, and the Spanish influenza pandemic reached Mexico in 1918.³³ The military and health authorities, the press and the public asked if the bullets or the microbes were causing the largest number of casualties.³⁴ According to the newspaper *El Demócrata*, it was imperative to save the lives of those who were surviving in the battlefields, a task that only hygiene could possibly accomplish.³⁵

In October 1915, when the city was in the midst of the typhus epidemic, the health authorities required physicians to deliver brief informal talks and lectures in schools, plazas, and public gardens to teach the importance of cleanliness, temperance, rest, fresh air, and exercise in preventing the disease.³⁶ Dr Alfonso Prunedá, who was responsible for the anti-typhus campaign, appointed 40 physicians to traverse the capital and search for possible carriers. Each physician was accompanied by 2 hairdressers, who would cut the hair of any suspected carriers in an attempt to prevent the spread of the disease.³⁷ Between 1916 and the end of 1917, a total of 90 000 people were bathed and had their hair cropped in Mexico City alone.³⁸ In addition, the health authorities ordered that any soldier in the capital with typhus be taken to the San Joaquín Lazaretto, a hospital for people

Señora!

**Para alimentar y cuidar
á sus niños recomendamos:**

Harina de Kufeke, Mellin, Nestlé, Wagner, Allenbury.

Leche maltada Horlick, condensada Nestlé y Aguila, vegetal Doctor Lahmann.

Aparatos para esterilizar leche,
MAMADERAS, ESPONJAS,
POLVOS DE TALCO, TERMÓMETROS PARA
BAÑOS, etc., etc.



ANTIGUA DROGUERIA DE LA PALMA
JOHANNSEN, FELIX y CIA.

AVENIDA DE SAN FRANCISCO NUM. 39.
Esquina del Callejón del Espíritu Santo.

MEXICO.

**How to feed your child. Healthful
childrearing advice to mothers.
From Barros y Buenrostro.⁵⁴**

with contagious diseases; cinemas and theaters were ordered to close, and a campaign against charlatanism was launched owing to the proliferation of “miraculous and infallible” remedies on the market.³⁹ Churches were permitted to open for only one hour on weekdays and two on Sundays because, the military authorities ruled, they were a threat to public health.

In December 1915, with the number of people with typhus increasing, the Ministry of the Interior took further steps. A special sanitary police was established; the retail sale of alcoholic drinks was forbidden; all public meetings were ordered to end by 11:00 PM; the city’s inhabitants were ordered not to have pigeons, hens, dogs, or any other animals inside their homes. Access to public places was also prohibited to people of “any social class who by their notorious dirtiness could carry on their body or clothes parasitic animals

which are transmissible.”⁴⁰ It should be noted that health education and hygienic propaganda in the press—and, in particular, advice on personal hygiene—was not disrupted during the violent years of the Mexican Revolution. Health advice was particularly prominent in the newspaper *El Demócrata*, which, among other things, published 200 pamphlets with instructions on how to prevent typhus. These were distributed free of charge among the city’s inhabitants.⁴¹

The Superior Board of Health acknowledged in January 1916 that the typhus epidemic had

in all health issues and impose adequate rules of health to be followed by both urban and rural populations. He also thought it was particularly important to combat alcoholism, communicable diseases, and the unsanitary conditions that prevailed in most urban and rural dwellings, believing those factors could lead to the degeneration of the Mexican race.⁴⁴ The struggle for health, Rodríguez believed, would be won only through legislation, health education, hygienic propaganda, and the use of force.

The 1917 Constitution did not include the notion of a “sanitary

health education became a top priority for the federal government and for the educational authorities beginning in 1921, when rural schools were created with the goal of transforming the peasantry into patriotic and scientifically informed citizens. In 1923, the “Cultural Missions” were created as a tool for updating rural teachers’ knowledge and methods. These missions comprised small groups of teachers (or “missionaries”) with various specialties, such as pedagogy, mathematics, hygiene, arts, and trades. The teachers made short, periodic visits (or “missions”) to isolated villages, with health advice featuring prominently in their programs.⁴⁵ The teachers also had the task of producing accessible popular literature that could reach the peasants directly. One example of such literature was the 1928 *Cartilla de higiene escrita especialmente para la población indígena (Pamphlet on Hygiene Written Specially for the Indigenous Population)*, distributed free of charge among the rural and indigenous people.⁴⁶

The *Cartilla* defined the virtues and benefits of individual and collective hygiene. Particular emphasis was placed on the health benefits of toothbrushing, hand washing, bathing, and avoiding unlicensed physicians.⁴⁷ In addition to education, however, the transformation of personal hygiene required such amenities as plumbing, bathrooms, and clean drinking water, which most rural dwellers did not possess. It should be noted that the *Cartilla* represented the indigenous populations as incompetent, ignorant, and superstitious, and stressed that it was necessary to modernize, educate, and sanitize them if they were to contribute anything to the nation.

“The *Cartilla* defined the virtues and benefits of individual and collective hygiene. Particular emphasis was placed on the health benefits of toothbrushing, hand washing, bathing, and avoiding unlicensed physicians.”

caused 2001 deaths during the past month alone, a situation that was of particular concern to both civilian and military authorities. General José María Rodríguez—who was also a physician and a deputy in the national Congress—was named director of the Superior Board of Health in August 1914; he reorganized the sanitary personnel and established a program of home visits as well as a house-to-house disinfection campaign. Rodríguez thought that, in the face of the epidemic and of the death and destruction caused by the civil war, the country needed a “sanitary dictatorship.”⁴² He envisaged a national system of public health coordinated and directed by the executive power, whereby the local and municipal health departments would be answerable only to the president of the republic.⁴³

According to Rodríguez, the executive power had to intervene

dictatorship,” but it did sanction that all individuals had the right to physical and mental health, and that the local or municipal government could not endanger the health of the community. The Superior Board of Health was transformed into the General Sanitary Council (Consejo de Salubridad General), with jurisdiction over the entire country, and was placed under the direct orders of the executive power. A Department of Public Health (Departamento de Salubridad), with federal jurisdiction, was also created. It launched some of the most important health education campaigns between the 1920s and 1940s, aimed not only at the urban population but at rural ones.

Throughout the 1920s, children and the indigenous populations were among the most important targets of health education campaigns. Rural

The importance that children's health education acquired during the 1920s became particularly prominent in September 1921, when Dr Gabriel Malda, head of the Department of Public Health from 1920 to 1924, organized the first National Week of the Child. During the festivities, a Child's Exhibition was organized; through graphs, charts, posters, and various objects, the place of health in the moral education of children was stressed. In 1923, pamphlets and calendars with hygiene maxims were distributed among the public, and a car parade with "healthy" children traversed the most important avenues of Mexico City on September 13. The celebration of children's health also included hygiene festivals in schools, the distribution of toothbrushes and other personal grooming objects to mothers and children, and an ingenious play about a "health fairy" that aimed to teach the principles of public health to school-aged children.⁴⁸

Popular health education and hygienic propaganda received further support in 1922, when the Section of Hygienic Education and Propaganda was created at the Department of Public Health. The section was commissioned to disseminate hygienic and health advice in schools, homes, and factories through the press, public lectures, radio, and film. Posters with advice on personal hygiene, healthy food, and sexually transmitted diseases—syphilis in particular—were put up in streetcars and markets. Circulars and pamphlets that underlined the importance of cleanliness, hand washing, vaccination, pasteurized milk, and exercise were distributed among schoolchildren and mothers. The Section of Hygienic Education and

Propaganda also launched the journal *El Mensajero de la Salud* (*The Health Messenger*), which through short stories, poems, and recipes advised the urban and rural populations on how to preserve their health. In its first number, published on May 15, 1922, *El Mensajero* introduced itself to the public with the following words:

I am a very small journal, but I pursue a very big goal. . . . What do I fight for? What do I want? I want HEALTH, I fight for HEALTH. Health is life, health is the greatest gift that man can possibly possess. . . . health is the generating force of all well-being, of all perfection. If all Mexicans were healthy, or if at least most Mexicans enjoyed good health, Mexico would be one of the most progressive and strong nations, because the country's natural wealth is fabulous. Unfortunately the percentage of the ill and of the dead is terrifying. . . . And that is why I emerge, why I advertise and fight for Health and for Hygiene.⁴⁹

From January to March 1925, a total of 140 000 pamphlets with health advice were distributed in Mexico City alone; in April and May, 10 000 pamphlets reached the rural areas.⁵⁰ The struggle for health became one of the key elements of the 1926 sanitary code, which stressed that popular health education was one of the main objectives of the health authorities. Throughout the 1930s and 1940s, intense health education campaigns were carried out in rural and urban settings through pamphlets, magazines, newspapers, cinema, and radio.

CONCLUSION

From the 1890s to the 1920s, health education, hygiene, and propaganda became key to the idea of Mexico as a strong and vigorous nation. At this time, health and personal hygiene became increasingly defined as patriotic and essential services to

Happy and healthy children according to Phosphatine Falieras food advertisement. From *El Mundo Ilustrado*.⁵⁵

el Cabello

Ayer

es un artículo de tocador, perfumado, de los mas delicados, con cuyo uso el cabello se pone suave, flexible y lustroso. Devuelve al cabello descolorido y gris la frescura de su primer color; conserva la cabeza libre de amores molestos al cabello. Hace estruendo la caspa.

igor abello

Ayer

demás prepara el favorito de las

J. C. Ayer y Ca., E. U. A.

PHOSPHATINE FALIERES

LA "FOSFATINA FALIERES" es el alimento más grande y el más recomendado para los niños desde la edad de seis a siete meses, y particularmente en el momento del destete y durante el período del crecimiento. Facilita mucho la dentición; asegura la buena formación de los huesos; previene y neutraliza los defectos que suelen presentarse al crecer, e impide la diarrea que es tan frecuente en los niños. —PARIS 6. AVENUE VICTORIA, Y EN TODAS LAS FARMACIAS.

the nation. During the late Porfiriato, the purposes and roles of health education were intimately linked to the government's aim to transform the capital into a modern and hygienic city. Mexico City was particularly important to health education campaigns and public health policies and programs, not only because the country lacked a national system of public health but because the capital had become the country's largest and most populated city. Health education was therefore seen as a tool to help transform the indigenous and poor immigrants into scientifically informed individuals, safeguard the capital from epidemics, and raise popular awareness of disease outbreaks and knowledge about disease transmission and prevention. The diverse goals, objectives, and actors involved in the promotion of health education during the late Porfiriato converged at the 1910 Popular Hygiene Exhibition.

During the armed phase of the Mexican Revolution, and in the midst of civil war and a typhus epidemic, the health authorities—in particular the physician General José María Rodríguez—launched the idea that it was necessary to impose a “sanitary dictatorship.” Only then, they argued, would it be possible to sanitize the country and its inhabitants, and prevent the degeneration of the Mexican race. The 1917 Constitution did not sanction the idea of a sanitary dictatorship, but it did expand the authority of the executive power over the entire country in matters relative to public health. Health education campaigns ceased to concentrate in urban environments—Mexico City in particular. During the 1920s, health education was

increasingly presented as essential for the consolidation of the postrevolutionary government.⁵¹

Health education was intimately linked to the social renovation and state consolidation that characterized the country during the period 1920 to 1940, when one of the aims of hygienists, public health officials, and the press was to sanitize and modernize the Mexican people and instill society with a new moral order. On the other hand, the history of Mexican health education during this period illustrates how attempts to control a community's health can lead to human rights abuses and can become an important source of government propaganda. ■

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Endnotes

1. For a thorough analysis of the political and economic transformations of Mexico during the 1920s, see Jean Meyer, “Revolution and Reconstruction in the 1920s,” in *Mexico Since Independence*, ed. Leslie Bethell (Cambridge:

Cambridge University Press, 1991), 201–240.

2. Ana María Carrillo, “El inicio de la higiene escolar en México: Congreso Higiénico Pedagógico de 1882,” *Revista Mexicana de Pediatría* 66 (2) (1999): 71–74.

3. Patience A. Schell, “Nationalizing Children Through Schools and Hygiene: Porfirian and Revolutionary Mexico City,” *The Americas* 60 (4) (2004): 559–587.

4. Alexandra Minna Stern, “Responsible Mothers and Normal Children: Eugenics, Nationalism, and Welfare in Post-Revolutionary Mexico, 1920–1940,” *Journal of Historical Sociology* 12 (4) (1999): 369–397, and *Eugenics Beyond Borders: Science and Medicalization in Mexico and the US West, 1900–1950* [doctoral dissertation] (Chicago: University of Chicago, 1999).

5. Milada Bazant, *Historia de la educación durante el Porfiriato* (Mexico City: El Colegio de México, 1993).

6. Mary Kay Vaughan, *The State, Education and Social Class in Mexico, 1880–1928* (De Kalb: Northern Illinois University Press, 1982), 18–19.

7. Engracia Loyo, *Gobiernos revolucionarios y educación popular en México, 1911–1928* (Mexico City: El Colegio de México, 1999), 3–4.

8. In 1858, Mexico City had 200 000 inhabitants. In 1895, the figure had risen to 329 774, and by 1910 the number was 471 000. In 1910, the country had 15 160 369 inhabitants, 71% of whom lived in rural areas. Moisés González Navarro, *Historia moderna de México. El Porfiriato—Vida Social* (Mexico City: editorial Hermes, 1957).

9. The construction of “public health works” and the sanitation of the capital city during the Porfiriato has been examined in Claudia Agostoni, *Monuments of Progress. Modernization and Public Health in Mexico City, 1876–1910* (Calgary, Alta: University of Calgary Press, 2003).

10. *Memorias del Primer Congreso Higiénico Pedagógico reunido en la ciudad de México el año de 1882* (Mexico City: Imprenta del Gobierno en Palacio, 1883), 10.

11. Porfirio Parra, “Pecados mortales contra la higiene,” *Revista Positiva* 12 (1901): 500.

12. José Álvarez Amézquita, Miguel Bustamante, Antonio López, and Francisco Fernández del Castillo, *Historia de la salubridad y de la asistencia en México*, vol. 1 (Mexico City: Secretaría de Salubridad y Asistencia, 1960), 420. On the life and work of Eduardo Liceaga, see Eduardo Liceaga, *Mis recuerdos de otros*

tiempos. *Obra póstuma. Arreglo preliminar y notas por el Dr. Francisco Fernández del Castillo* (Mexico City: Talleres Gráficos de la Nación, 1949).

13. Manuel S. Iglesias, “Medidas que deben adoptarse para disminuir el número de fallecimientos en los cinco primeros años de vida,” *Gaceta Médica de México* 3 (1903): 335.

14. Manuel Aveleyra Arroyo de Anda, *La higiene escolar en México. Publicación conmemorativa de setenta y cinco años de actividades de higiene escolar en México, 1882–1957* (Mexico City: Editora de Periódicos, SCL, La Prensa, 1958), 69–73.

15. Books on domestic medicine, as well as health manuals and pamphlets, circulated in the main towns and cities throughout the Colonial Period and the 19th century. See, for instance, Ruth Wold, *El Diario de México. Primer cotidiano de la Nueva España* (Madrid: Gredos, 1970), 186–187; Herman Boerhaave, *Consejos y preceptos de medicina, trans. D. Puertas* (Madrid, 1796); Guillermo Buchan, *Medicina doméstica. Tratado completo de precaver y curar las enfermedades con el régimen y medicina simple*, trans. Antonio Alcedo (Madrid, 1798); Guillermo Cullen, *Elementos de medicina práctica*, (Madrid, 1788–1791); Johann Peter Frank, *Tratado sobre el modo de criar sanos a los niños, fundado en los principios de la medicina y de la física, y destinado a los padres, que tanto interés deben tener en la salud de sus hijos*, trans. D. I. De O (Madrid: 1803). The work of the Spanish physician and hygienist Pedro Felipe Monlau was also widely read in Mexico. See *Elementos de higiene pública; ó Arte de conservar la salud de los pueblos* (Madrid: Rivandeyra, 1862); *Higiene de los baños de mar* (Madrid: Rivandeyra, 1869); and *Nociones de fisiología e higiene* (Madrid: Rivandeyra, 1872). Among the many manuals, books, and guides published during the late Porfiriato, see Antonio Casillas, *Cartilla de higiene militar* (Mexico City: Talleres del Departamento de Estado Mayor, 1905); Donaciano González, *Breve estudio sobre higiene de los templos* (Mexico City: Tipografía de la Secretaría de Fomento, 1902); Luis E. Ruiz, *Cartilla de higiene. Profilaxis de las enfermedades transmisibles para la enseñanza primaria* (Paris: Viuda de Charles Bouret, 1903); and Luis E. Ruiz, *Tratado elemental de higiene* (Mexico City: Oficina Tipográfica de la Secretaría de Fomento, 1904).

16. Florence Toussaint Alcaraz, *Escenario de la prensa en el porfiriato* (Mexico City: Fundación Manuel Buendía, 1989), 11. In 1884, there was one journal for every 7208 inhabitants of Mexico City; in 1907, the proportion was 1 for every 1679 people.

17. Fernando Escalante Gonzalbo, *Ciudadanos imaginarios* (Mexico City: El Colegio de México, 1993), 269–270.
18. On health advice and hygienic propaganda in the Mexican press, see Sergio López Ramos, *Prensa, cuerpo y salud en el siglo XIX mexicano (1840–1900)* (Mexico City: Miguel Ángel Porrúa—CEAPAC, 2000) and Clementina Díaz y de Ovando, *Odon-tología y publicidad en la prensa mexicana del siglo XIX* (Mexico City: Universidad Nacional Autónoma de México, 1990).
19. Mexico participated at the Paris Exposition of 1889, the World's Columbian Exposition of Chicago (1894), the Paris International Exposition (1900), and the Pan-American Exposition in Buffalo (1901), among others. See Mauricio Tenorio Trillo, *Mexico at the World's Fairs. Crafting a Modern Nation* (Berkeley: University of California Press, 1996). On the International Sanitary Conferences, see Norman Howard-Jones, *The Scientific Background of the International Sanitary Conferences, 1851–1938* (Geneva: World Health Organization, 1975).
20. Genaro García, *Crónica oficial de las fiestas del Primer Centenario de la Independencia de México* (Mexico City: Talleres del Museo Nacional, 1911) and Consejo Superior de Salubridad, *La salubridad e higiene pública en los Estados Unidos Mexicanos. Brevisima reseña de los progresos alcanzados desde 1810 hasta 1910* (Mexico City: Casa Metodista de Publicaciones, 1910).
21. Juan de Dios Montero, “La Exposición de Higiene,” *El Imparcial* 2 (September 1910): 4.
22. “Cuestionario del Consejo Superior de Salubridad,” Archivo Histórico de la Secretaría de Salubridad y Asistencia (hereafter AHSSA), Salubridad Pública, box 9, file 7, Congresos y Convenciones, 1909–1910.
23. “La 7ª Conferencia en la Exposición de Higiene,” *El País, Diario Católico*, September 22, 1910, p. 3.
24. “Notable Conferencia en la Exposición de Higiene. Se exhibió una interesante película,” *El Imparcial* October 16, 1910, p. 1.
25. Eduardo Liceaga, “Higiene. El combate contra la tuberculosis,” *Gaceta Médica de México* 5 (May 1907): 160–161.
26. R. E. Manuell, “Academia Nacional de Medicina. Las exageraciones de la campaña antituberculosa,” *Gaceta Médica de México* 9 (September 1909): 656.
27. Nancy Tomes, *The Gospel of Germs. Men, Women, and the Microbe in American Life* (Cambridge, Mass: Harvard University Press, 1999).
28. “Relación de los trabajos de la Exposición de Higiene, presentada al Presidente del Consejo Superior de Salubridad,” AHSSA, Salubridad Pública, box 10, file 18, Congresos y Convenciones, October 1910.
29. “Entradas a la exposición del 3 al 30 de septiembre,” AHSSA, Salubridad Pública, box 6, file 27; “Noticia del número de escuelas oficiales y particulares y el número de alumnos que han visitado la Exposición de Higiene,” box 10, file 16.
30. “Relación de los trabajos de la Exposición de Higiene.”
31. “La 7ª Conferencia en la Exposición de Higiene.”
32. “Documentos relativos a la ocupación del Pabellón Español para depositar los objetos que sirvieron para la exposición de Higiene,” AHSSA, Salubridad Pública, box 10, file 19, November–December 1910.
33. John Womack, Jr., “The Mexican Revolution, 1910–1920,” in *Mexico Since Independence*, ed. Leslie Bethell (Cambridge, England: Cambridge University Press, 1991), 185.
34. “Bacilos o balas,” *El Demócrata*, September 15, 1915, p. 1.
35. “La campaña contra el tifo. Urge higienizarnos,” *El Demócrata*, December 29, 1915, p. 3.
36. “La forma segura de evitar la propagación de tifo será la de que se observe la higiene en cada hogar,” *El Demócrata*, October 22, 1915, p. 1.
37. “Cuarenta médicos y numerosos peluqueros combaten al tifo,” *El Demócrata*, December 24, 1915, p. 3.
38. Alvarez Amézquita et al., *Historia de la salubridad*, vol. 2, p. 44.
39. “Iniciativas para coadyuvar a la campaña emprendida contra el tifo,” *El Demócrata*, December 25, 1915, p. 5.
40. Alvarez Amézquita et al., *Historia de la salubridad*, vol. 2, p. 44.
41. “El Consejo Superior de Salubridad acepta nuestro ofrecimiento,” *El Demócrata*, December 28, 1915, p. 1.
42. Alvarez Amézquita et al., *Historia de la salubridad*, vol. 2, p. 104.
43. José María Rodríguez, “Federalización de la salubridad,” in *50 Discursos doctrinales en el Congreso Constituyente de la Revolución Mexicana, 1916–1917* (Mexico City: Instituto Nacional de Estudios Históricos de la Revolución Mexicana, 1967), 310–311.
44. José María Rodríguez, “Informe que rinde el Jefe del Departamento de Salubridad de los trabajos efectuados por el Departamento a su cargo en 1917 al C. Presidente de la República,” in *Memoria de los trabajos ejecutados por el Departamento de Salubridad Pública en el año de 1917* (Mexico City: Imprenta Victoria, 1918), vi–vii.
45. Loyo, *Gobiernos revolucionarios*, 220–228.
46. *Cartilla de higiene escrita especialmente para la población indígena* (Mexico City: Secretaría de Educación Pública—Talleres Gráficos de la Nación—Biblioteca del Maestro Rural Mexicano, 1928).
47. *Ibid*, 22.
48. On the 1921 “Week of the Child,” see the information published during the months of August and September in the newspapers *El Demócrata* and *El Universal of Mexico City*.
49. “Buenos días. Lo que soy y lo que quiero,” *El Mensajero de la Salud*, May 15, 1922, p. 1.
50. *Boletín del Departamento de Salubridad Pública* (Mexico City: Departamento de Salubridad Pública, 1925), no. 1, p. 174; no. 2, p. 150; and no. 4, p. 172.
51. Alan Knight has noted that the revolutionary governments “sought to mold minds, to create citizens, to nationalize and rationalize the wayward, recalcitrant, diverse peoples of Mexico . . . to inculcate . . . notions of citizenship, sobriety, hygiene, and hard work.” See Alan Knight, “Popular Culture and the Revolutionary State in Mexico, 1910–1940,” *Hispanic American Historical Review* 74 (3) (1994): 394–395.
52. Aurelio de los Reyes, *Cine y Sociedad en México, 1896–1930. Bajo el Cielo de México*, vol 2 (Mexico City, Mexico: Universidad Nacional Autónoma de México—Instituto de Investigaciones Estéticas, 1993), 105.
53. Cristina Barros y Marco Buenrostro, *Vida Cotidiana, Ciudad de México, 1850–1910* (Mexico City, Mexico: Consejo Nacional para la Cultura y las Artes, 1996), 121.
54. *Ibid*, 72.
55. *El Mundo Ilustrado*, April 6, 1902.