

philippine studies

Ateneo de Manila University • Loyola Heights, Quezon City • 1108 Philippines

State, Society, and Sickness: Tuberculosis Control in the American Philippines, 1910–1918

Aaron Rom O. Moralina

Philippine Studies vol. 57, no. 2 (2009): 179–218

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State, Society, and Sicknes

Tuberculosis Control in the American Philippines, 1910–1918

This article narrates the tuberculosis campaign in the American Philippines from 1910 until 1918 and elucidates the character of the disease control enterprise as a combination of the programs of the colonial state and the Philippine Islands Antituberculosis Society. The state's interventionist measures, complemented by the reformatory engagement led by the antituberculosis society, sought to restrain and reform the population in order to reduce alarmingly high tuberculosis mortality rates. The two-track character of the campaign remained unchanged, but the Filipinization of the colonial bureaucracy as well as the perception that urbanization was becoming a major epidemiological factor posed some challenges, which created a milieu for more desperate attempts to change the framework of efforts to control the disease.

KEYWORDS: TUBERCULOSIS · PHILIPPINE ISLANDS ANTITUBERCULOSIS SOCIETY · HYGIENIC REFORMATION · STATE INTERVENTIONISM · TWO-TRACK SYSTEM

In most treatises that have looked into the relationship between public health and American colonialism, the impression is that the duty of carrying out disease control was exclusively taken by the colonial state. What immediately comes to mind is the image of the gun-toting American sanitary inspector, from whom emanated the categories of filth and cleanliness, of recalcitrance and obedience, and of sanitary suspect and sanitary ally, all of which were imposed upon the new colonial subjects. Iletto (1988; 1995) and Sullivan (1989; 1992) have shown the extent to which health measures during the 1902 cholera epidemic intensified political conflicts between Americans and Filipinos. Harsh quarantine measures and erroneous laboratory experiments became excesses behind the “scale and modernity” of the American anticholera campaign, serving as extensions of the Philippine-American War. Even outside the ambit of imperialist warfare, it can be told from Anderson (2007) that the American *mission civilisatrice* put the spotlight on colonial health officials, who possessed the medical and scientific discourses that they themselves utilized to justify or hinder the Filipino struggle for self-governance. Although De Bevoise (1997) does not attribute the devastation caused by epidemic diseases entirely to the success or failure of the colonial state in implementing disease control, state actors—municipal physicians, military officials, and government officials—have been viewed as the main protagonists in the story of the fusion of epidemiological factors, such as the change in cultural attitudes regarding sexuality, inexperience in carrying out a relatively new vaccination program, transition to a new agricultural export economy, and progress in transcontinental travel. Indeed public health knowledge emanated from the agency of the state, which accorded confidence in its assumed right to intervene in the private realm for the benefit of “public welfare.”

However, the agency of disease control was not entirely assumed by the state in the campaign against tuberculosis, which, as one historian puts it, had “killed far more Filipinos over the past two centuries than all the cholera epidemics put together” (Owen 1987, 6). A chronic disease that did not elicit the usual drama attached to measures against epidemic diseases, TB compelled the American colonial state to create ample space for the participation of the colonized population. The year 1910 was declared as the start of a “systematic campaign against tuberculosis” with the formation of the Philippine Islands Antituberculosis Society (PIAntiTBS), a state-funded organization composed of Filipino and American elites (the precursor of

today’s Philippine Tuberculosis Society), which was tasked to manage the San Juan Tuberculosis Hospital, a hospital-sanatorium devoted exclusively to incipient tuberculars.

This article narrates a disease control enterprise whose setup went beyond the colonial state to mobilize private individuals. An organization entirely composed of nonstate actors, created to administer a public health facility intended to “reform” diseased bodies, dovetailed with the conventional roles played by the colonial state in public health. This arrangement had to do with how TB control was perceived as a campaign to restrain out-of-control native bodies but launched ultimately to “reform” them. As such, a two-track approach—a reformatory campaign, alongside tactics of exclusion, surveillance, and segregation—was employed.

Soliciting the Society’s Support

Since 1898 disease control efforts in the American-occupied Philippine Islands consisted primarily of extremely interventionist measures. To stop contact infection, bubonic plague, cholera, and smallpox were addressed by relying on the capacity of the colonial state to use force to restrict population movements, subject potential susceptible hosts to surveillance, isolate the sick, and employ therapeutics on those who could still recover. If available, clinical prophylaxes were also administered, most of the time forcibly, in order to confer artificial immunity on the population. Unsurprisingly, such measures were implemented with utmost coercion to the extent that they became brutal extensions of the colonial war of aggression.

Early tuberculosis measures could be located somewhere in this milieu, as initially they were part of the legislations aimed at restricting behaviors and routines rehearsed by the population in the public realm. The Sanitary Code of Manila in 1907, for instance, discouraged spitting, compelled Manileños to avoid dry sweeping of streets, and ordered proper ventilation in their homes. Tuberculosis was also included in the list of “reportable diseases” together with bubonic plague, cholera, smallpox, and other contagious illnesses that had to be reported by anyone who would encounter sufferers of these diseases. Extensive reliance on restrictive laws was the call of the day, characterizing an insecure colonial state that was still in the process of consolidating its authority in a new colony.

Somehow health officials recognized that, despite the restrictiveness of these interventionist measures, their underlying principle was the hope that

locals could be “reformed” from their “unsanitary” ways. For instance, in 1905 Director of Health E. C. Carter remarked that the Bureau of Health must rely on legislation so that the people—the “Orientals” he viewed as afflicted with the “curse” of the habits of careless spitting—would be forced “to do what ought to be done by exercise of common sense and common decency” (Bureau of Health 1906, 34). But he was aware that laws and ordinances were inadequate in themselves and the ultimate success of tuberculosis control lay in the teaching of the “gospel of cleanliness” in order to prevent the contraction of the disease. The success of the campaign depended “more upon the public schools and good examples” rather than the direct efforts of the sanitary officials” (ibid., 34). Carter was certain that the campaign against tuberculosis should acquire an educational character, with health officials taking the secondary role.

Education was also significant to Carter’s successor, Director of Health Victor Heiser, who likewise gave primacy to reforming behavior owing to the “oriental filthiness” from which Filipinos suffered. His assessment of the problem of TB was informed by racialist notions of immunity, as he attributed the likelihood of Filipinos contracting TB to their physiology—long neck, narrow and flattened chest, sloping shoulders, and poor development of the pectoral muscles (ibid., 38). Heiser also believed that a lot of habits predisposed Filipinos to TB, such as carelessness and indifference with regard to spitting, lack of exercise, poor quality of food taken by the lower classes, tight tying of clothing around the waist (which Heiser believed to cause digestive disturbances), smoking, custom of eating with fingers, and using the clothes formerly worn by a deceased member of the family (ibid., 37–38). It was clear that despite its many determinants, TB control, at least according to Heiser, had much to do with education. He surmised that, although the disease could be practically eradicated by following a few “simple but imperative rules of sanitation,” Filipinos were not adept at complying with the gospel of hygiene—just as it was “easier to be bad than good, so it is easier to be insanitary than sanitary” (ibid., 51). “Legislate as we may, the filthy, deadly habit still continues,” Heiser told his colleagues. “Nothing but education will ever stop the spitting habit” (ibid.).

Behavior reform and education on hygiene would become dominant themes in Heiser’s subsequent reports. His racialist overtones would later fade, and he would underscore how sole reliance on regulations and laws was no longer viable in this campaign. In 1909 Heiser reminded health

officials of the natural difficulty of carrying out early detection of TB cases despite the deployment of laws that pertained to its compulsory notification. He stated that before tuberculars would start to register themselves voluntarily to the authorities, the initial step was “to talk a great deal about tuberculosis in every community” (Heiser 1909, 93). This meant conducting informal talks, giving free lectures, utilizing visual fixes such as lantern slides, setting up exhibits, distributing leaflets, and the like. The instruction on proper hygiene should then be complemented by focused health measures such as visiting nurses, sanatoriums, and dispensaries, all devoted to TB. The reformatory aspect of the disease control campaign would have to be given primacy, while the restrictive laws would have to be given an auxiliary role to play.

Heiser’s apprehension of engaging a noncooperative population was not unfounded. Ever since the first health measures were launched in the Islands, health officials had received a huge amount of public disapproval even from the social stratum within which they expected to make allies. During the cholera epidemic outbreak of 1902, Filipino and Spanish doctors were unwilling to notify health authorities of cholera cases, such that they consciously breached sanitary measures in an effort to deride their American counterparts. Secretary of the Interior Dean Worcester, in his *A History of Asiatic Cholera in the Philippines* (1909), had reported that doctors “not only failed to give assistance, but in many instances, by neglecting to report cholera cases, by falsely reporting them, and by decrying the sanitary measures deemed necessary by the authorities, added materially to the crushing burdens which rested upon the Board of Health” (Philippine Commission 1900, 271; cf. Iletto 1988, 141). Apparently, this antipathy towards health officials had much to do with how the American sanitary order threatened the sociopolitical influence of local physicians (Iletto 1988, 142–43). Seeing themselves as suddenly losing their influence over the masses, Filipino doctors were not too enthusiastic with the idea of cooperating with the Americans, who summoned them to register every cholera case and compelled them to carry out forcible hospitalization. Even years after the epidemic, this antipathy was not easily cast aside and doctors continued to defy colonial officials. When the Sanitary Code of Manila was being prepared, it was reported that local physicians protested most of its provisions, in particular the one that pertained to compulsory notification and hospitalization of those afflicted with infectious diseases. When the Sanitary Code was enacted

in 1907, it was very different from its original version, causing Heiser (1908, 55) to remark that its “usefulness and effectiveness have been considerably lessened.” But even with a more lenient code, opposition to it would continue. In 1912 the legality of the revised ordinances in Manila was brought into question in local courts, which ruled that some were implemented without due publication in newspapers and must be declared void (Heiser 1913a, 16).

This antipathy was not good news for tuberculosis control. During this period, only the cooperation of the public and local physicians would offset the inadequacy of available state technologies to carry out early detection and prevention. As much as most American health officials had already been influenced by the modern germ theory, or more specifically the theory that ascribed disease etiology to a single pathological cause, there was no clinical cure or prophylactic that could be used to treat patients conclusively.¹ The disease, characterized in its early stages by nonalarming pulmonary symptoms similar to a common flu, could only be validated by the local physician through clinical methods, such as sputum examination, x-ray, or crude tuberculin detection tests. As such the physician had a vital role to play in the early detection of TB in the antituberculosis campaign that the Bureau of Health envisioned. As much as Heiser was aware that any antituberculosis measure would not succeed without public cooperation, active participation of local physicians in rendering “their service to the country” by reporting tuberculosis cases to the authorities was equally substantial (Heiser 1906, 38). Physicians should be able to convince that it would be in the interest of the people to inform the authorities about their tuberculous family member. For Heiser (1902, 92), local physicians must help in making the public abandon their aversion toward compulsory notification, and making “all cases of tuberculosis” known to the authorities. Only then would subsequent infections be deterred, thus eventually reducing morbidity and mortality.

The Philippine Islands Antituberculosis Society

In 1910 the San Juan Tuberculosis Hospital, the first public health facility in the country that would exclusively admit tuberculars, began construction; it was to be a site that strongly emphasized hygienic education. Unlike the existing public hospitals such as San Lazaro Hospital, the Philippine General Hospital, and the Baguio Hospital, the San Juan TB Hospital focused not on relief but on hygienic reform. Heiser made it a point that the TB hospital admitted not

those with terminal tuberculosis but only those who were still in the early stages of the disease and had the biggest chance of recovery. Patients were allowed to work during the day but were admitted at night and instructed in matters of hygiene and TB prevention for a limited number of months, after which they were sent home to “carry out the hygienic measures which they have been taught” at the hospital (Heiser 1910, 93). The TB hospital would have turned them into the new preachers of the “gospels of hygiene” for the campaign against tuberculosis.

The construction of the TB hospital was funded by the insular government, but upon its completion in 1911 it was handed over to a “semiprivate” antituberculosis society whose origins could be traced to the Far Eastern Association for Tropical Medicine in Manila, which resolved in March 1910 to “influence the formation of a national antituberculosis society . . . along the lines of existing antituberculosis societies in other parts of the world, yet revised to facilitate the work under local conditions” (Heiser 1910, 47). Two months later, the Philippine Islands Antituberculosis Society (PIAntiTBS) was formed, and with a big state funding was incorporated under the laws of the insular government.

It must be noted that the setting up of quasi-state organizations was not new to the public health campaign by 1910.² Still the involvement of the PIAntiTBS in disease control had novel features. The Society was the first to have served as an administrative appendage of the Bureau of Health in managing a state-funded health facility. It was primarily composed of nonstate actors but financially supported by the state, given the amount of P50,000, the largest allocation to a semiprivate effort for the purpose of disease control. With a lot of clout given to the organization, the colonial state granted it the powers to extend its membership and activities throughout the Islands. No systematic disease control enterprise gave as much space to the colonized population to participate as the PIAntiTBS.

For this reason the emergent character of the campaign was significant. The framework of disease control was beginning to shift from immense reliance on laws and regulations to soliciting the support of the society and the local physician. Only within this milieu could the formation of the Society, and the clout granted to it by the colonial state, be understood. The state and its available technologies to control TB had no chance of succeeding in controlling the disease, and the state desperately needed an ally to engage the population whose habits and behaviors were viewed as “unsanitary.”

The quasi-state organization served its purpose in mediating in the engagement of the colonial state with the colonized community, both in instructing the “hygienic virtues” to the tubercular and the whole population and in enticing local doctors to cooperate with health authorities in implementing health measures. Members of the antituberculosis society were nonstate actors who, as members of the elite, were in a social position to lead a reformatory campaign. This elitist composition was likewise meant to appeal to Filipino doctors to lead and participate in early detection and behavioral reform. Much like how Filipino doctors were made to cooperate during the cholera epidemic—during which they were given some measure of control—the antituberculosis society became a venue within which the doctors could see themselves as getting back their influence over the masses. The antituberculosis society was a means by which the colonial state extended its hand to the stratum whose sociopolitical clout it took away during the early days of the occupation, and through them to the other strata that it viewed as in terrible need of reform in hygiene.

The preparations made for the founding meeting of the PIAntiTBs revealed the intention of the colonial state to attain this engagement. It was an open event. The *Manila Times* (1910b, 18) reported that everyone was invited, whether or not they had received an invitation, as the people behind the Society wanted to have as large an attendance as possible. Race was to have no role: “In the formation of this organization, there is to be no distinction of race . . . Filipinos and Americans are taking the initiative in the organization but membership is open to all races” (*Manila Times* 1910a, 10). It seemed that the racial divide must be collapsed so that the campaign against TB could be launched effectively. Concomitantly, this meant that racist remarks regarding Filipino bodies had to be suspended, at least temporarily. There was no space for racist explanations behind the prevalence of TB in the Islands in the unfolding of another phase of the disease control campaign.

The actual founding meeting of the Society in July 1910 could easily have been mistaken for a political rally. Big names in the American Philippines were among the Society’s “incorporators”: Gov.-Gen. William Cameron Forbes, Speaker of the House Sergio Osmeña, Secretary of Interior Dean Worcester, Philippine Islands Medical Association President Ariston Bautista, Director of Health Victor Heiser, among others. Predictably, the Society’s first appointed officers were elites (but with no Filipino doctors yet)—its first president was Eleanor Egan, the wife of the American businessman

Martin Egan, while its officers were either *pensionados* or wives of colonial bureaucrats. To add prestige to the event, the Society’s first lifetime member was United States Secretary of War Jacob M. Dickinson, who was on an official state visit to the Islands during that year.

There might have been a celebratory mood during the event, but it never digressed in sending its message that combating “the greatest scourge of all diseases in the Philippines” was of extreme urgency. For Governor-General Forbes, the establishment of the antituberculosis society was a response to the great necessity for “immediate and concerted action in all sections of the archipelago to lessen the ravages of the great white plague” (*Manila Times* 1910c, 9). But the tone of his speech did not invoke images of sanitary inspectors and patrol guards taking charge of a stubbornly filthy population. After all, he was not speaking in a closed-door meeting of colonial officials planning to impose new restrictions on the colonized population. “We are here to save hundreds of thousands of lives which are threatened and millions which will be if this terrible disease is not brought under control,” Forbes declared (*ibid.*, 9). It was a call-to-action to this audience—not the masses whose filthiness was suspect, but dignitaries from the church and the state, physicians and scientists, nurses and high society women, businessmen and students—groups of people from whom the American colonial state would recruit its allies in the campaign against TB.³

Right after its formation, the Society became involved in publicizing the antituberculosis campaign. Eleanor Egan became a common sight in speaking engagements, from which she acquired the support of various groups like the Filipino Women’s League and the First Presbyterian Church, as well as dignitaries such as Murray Bartlett of the American Cathedral (who would also become a president of the University of the Philippines) and the City Superintendent of public schools in Manila (see, e.g., *Manila Times* 1910d; 1910e; 1910f). By 1911, in addition to the San Juan TB Hospital, the Society was managing five dispensaries scattered all over the capital Manila—along Rizal Avenue, San Nicolas District, Paco, Tondo, and Sampaloc (Fox 1911, 24). To generate additional revenues, it conducted public showing of art films, held sales (of items such as candies and flowers), and solicited supplies or cash donations from private initiatives.

More importantly, the Society established branch divisions in a number of provinces, similarly employing the help of political figures and local elites. It claimed to have successfully formed a “Moro division” in 1910 in

Zamboanga, with Gen. John J. Pershing, the governor-general of the Moro province, presiding in the founding meeting of its branch there (*Manila Times* 1910g). Its division in Cebu, which initially elected Gov. Dionisio Jakosalem as the branch's director, and District Health Officer Arlington Pond as secretary, had Osmeña as one of the guest speakers (*ibid.*). By 1911 the Society had a total of five divisions, with Dumaguete and Iloilo being added to the existing three. In a way, by striving to create as many divisions as possible, the Society was widening its scope parallel to that of the colonial state. It was the health officials' ideal character of the disease control effort—a reformatory campaign that was led not by the Bureau of Health, but by an ally organization that signified somehow the cooperation of the colonized population. The PIAntiTBs took its position in the antituberculosis enterprise not without optimism, as it rallied the motto “No tuberculosis in the Philippines in 1920” (Fox 1911, 24).

Continuation and Expansion of State Interventionism

With the reformatory aspect of the TB campaign culminating in the establishment of a quasi-state ally organization, the Bureau of Health continued to expand its interventionist measures. Consisting of restrictive legislations and other coercive measures based on exclusion, surveillance, and even attempts at segregation, these measures were intensified and expanded in scope, and were brought to provinces outside Manila.

Antispit Measures

By 1910 the Bureau of Health had been placed in charge of the sanitary condition of industries. It got the upper hand in introducing tuberculosis-specific health measures in factories and other manufacturing facilities in the Islands. Particularly targeted were cigar factories, whose manufacturing productivity had intensified since the lowering of the tariffs on exports to the U.S. through the enactment of the Payne-Aldrich Act, which started paving the way for free trade relations between the Philippines and the United States. In response to the American public's suspicion of sanitary standards in Philippine cigar factories, manufacturers were required in 1910 to provide disinfected spittoons as a means to properly dispose of sputa,⁴ and compelled to prohibit the use of saliva in rolling tobacco (Heiser 1910, 34).

Cuspidors and spittoons also served as the Bureau of Health's complementary measure to the prohibition of spitting in public spaces in Manila.

In 1913 the Bureau started providing them in places suspected as sites where tuberculosis was easily transmitted. Crowded places such as public markets in Manila were viewed as such sites, and the matter of providing cuspidors and spittoons was regarded by the Bureau of Health as serving an “educational feature in the prevention of the common habit of expectorating” (Heiser 1913b, 29). Although by the end of fiscal year 1913 health officials would express great difficulty in preventing spitting in marketplaces, more cuspidors and spittoons had been installed in the hope of providing “at least an educational value” (Heiser 1914, 22).

Tiendas selling food items (the earlier version of small eateries locally called *turo-turo*) were viewed by health officials as contributing to the spread of TB because their patrons used common cups for drinking, a disconcerting observation because of the notion that saliva was a vehicle for TB transmission. Health officials attempted to address this problem by promoting the use of “sanitary cups” (fig. 1) that could easily be crafted from paper (Heiser 1913b, 68).

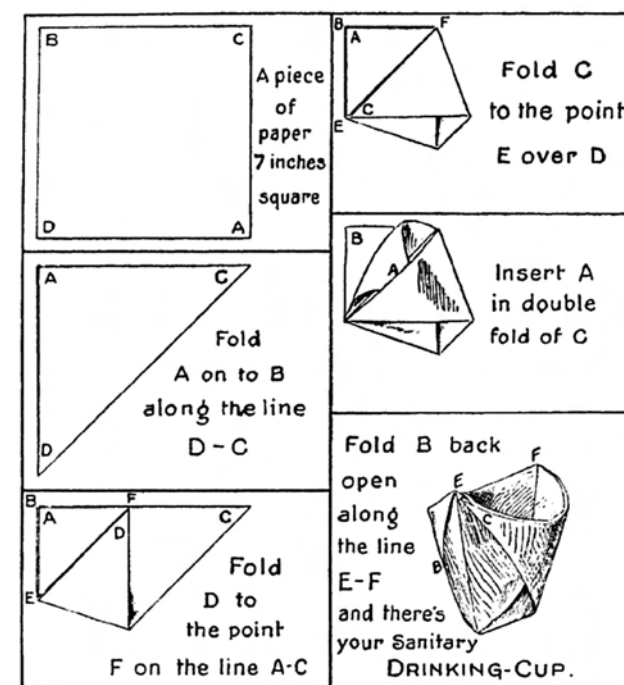


Fig. 1. Sanitary drinking cups promoted by the Bureau of Health

Source: Heiser 1913b, 68

Reiteration of Compulsory Notification

In 1911 the Bureau of Health had to reiterate that TB was included in the list of “reportable diseases” in Manila since the enactment of the sanitary code, which rendered it as a “dangerous communicable disease” subject to compulsory notification. It was indicative of the continued indifference of physicians toward mandatory reporting of TB cases to health authorities. Acting

NOTIFICATION CARD.

MANILA, P. I., _____, 191

Disease or suspected disease _____ Type or form of the disease _____

Clinical diagnosis? _____ Confirmed in laboratory? _____ By whom _____

Time and date of onset of disease _____

Patient's name _____ Age _____ Sex _____ Race _____

Patient's address _____ { Resident? _____

Transient? _____ How long in city _____

Number in household: Adults _____ Children _____

Any previous case in household? _____ When? _____

Occupation _____ { School attended _____

Place of employment _____

Probable source or origin of infection _____

Specify what immunization method, if any, and how long ago has previously been used _____

2—610

FRONT

In compliance with the provisions of the Sanitary Code as contained in the Revised Ordinances, city of Manila, I wish to report a case of dangerous communicable disease as described on the reverse side.
Yours respectfully,

Signature _____ M. D.

Address _____

The following diseases are strictly reportable:
Smallpox. Typhoid and Pertussis.
Varicella. Paratyphoid. Plague.
Measles. Dysentery. Cerebro-spinal
Cholera. Diphtheria. Meningitis.
Tuberculosis. Leprosy.

The Director of Health,
Manila, P. I.

2—610

BACK

Fig. 2. Notification card introduced in Manila in 1916

Source: Long 1917a, 47–48

Director of Health Carroll Fox (1911, 12) reported that, while diseases such as cholera, smallpox, leprosy, and bubonic plague were “exceptions to the rule of negligence” because they had been generally reported, other diseases such as TB were frequently forgotten. As added incentive, reporting of TB as well as other “rarely reported” diseases was made easier. Instead of an immediate notice through telephone or via messenger as usually required in other diseases, reporting of TB merely entailed a written notice sent to health authorities within twenty-four hours (ibid., 12).

The utmost difficulty involved in implementing the compulsory notification law was manifest in this reiteration. The indifference among physicians continued to deter the health officials’ intent to monitor pathogen carriers and conduct early detection of TB. Alongside the enticing effect of an elitist antituberculosis society, subsequent years would witness various attempts by health officials to persuade physicians to comply with compulsory notification. To facilitate reporting, notification cards were introduced in Manila in 1916 (fig. 2). These cards were to be filled by any practicing physician who diagnosed persons with reportable communicable diseases (Long 1917a, 47–48). These cards were sent to the nearest health station, which would forward all collected cards to its central office.

Measures against Overcrowding, Publicity Campaign in State Carnivals, and the Establishment of the Fly Vector

Health officials stepped up their campaign to address overcrowding. Since 1907 the Sanitary Code of Manila had imposed a required cubic feet of air space per room that corresponded to the number of persons staying in the room. Manila residents soon had to comply with health inspectors tasked to put up “cardboard cartons” on doors of every sleeping room, indicating the allowed number of people who might “legally inhabit the room” (Fox 1911, 38). In 1912 tenements and lodging houses were required to assign a caretaker to whom sanitary regulations were given and who was held responsible for any violation of those regulations (Heiser 1913a, 16).

The campaign against overcrowding, as well as other determinants of the spread of TB, was brought to the publicity front when in 1911 the insular government started holding annual state carnivals. Intended to showcase the virtues of the colonial project, these carnivals provided opportunities to the Bureau of Health to extol the gospels of hygiene and disease prevention. Exhibits of “sanitary houses” and “sanitary barrios” were put up to por-

tray the colonial ideal regarding the construction of private dwellings and arrangement of residential zones. Depicted were houses constructed with strong materials (i.e., galvanized iron roofs in lieu of nipa) and decent sanitary facilities (e.g., clean water supply, water closet, drainage, and toilets that complied with Bureau of Health standards) (ibid., 24). Another ideal feature was the limited number of people inhabiting the “sanitary house” to promote proper ventilation. Although the most appropriate type of dwelling for the tubercular was the humble nipa house because of adequate ventilation, sanitary engineers wanted to make it more salubrious (i.e., dust free) and less fire-prone (ibid., 24).

Health exhibits in the Manila carnivals usually exaggerated their portrayal of TB as a public threat, indicating an alarmist feeling shared by American health officials during the postcholera epidemic period. Images of death and suffering were associated with households that would not comply with the colonial standards of sanitation (fig. 3). Certainly households were sites of TB infection, and as such the filthy ones had to be cleaned well in order to curb the incidence of the disease.

Spit, dust, and improper ventilation were the usual suspects in these exhibits. But another epidemiological factor was soon included—the fly vector, with its ability to transmit infective materials from sputum to eating utensils, rendered it as a vehicle for TB transmission. In 1911 the Bureau of Health started to associate TB exhibits with the fly, depicting it as the “enemy of sanitation” that might carry the germs of “nearly all intestinal diseases,” as well as tuberculosis and pneumonia whose dissemination the fly “undoubtedly” had a part (Fox 1911, 22).

Aside from the efforts to attribute TB prevalence to the fly vector in health exhibits, an attempt was made to invoke the nightmare of the 1902 cholera epidemic, suggesting that health officials wanted to foment an alarmist response to TB control. TB became equated with the fatal cholera, and exhibits did not fail to underscore the disease’s association with environmental filthiness and absence of personal hygiene. Diagrams depicting family members eating with their hands in a common dish were intended to buttress the dictum “no fingers, no cholera” that health officials preached along the same lines of “no house, no tuberculars” (ibid., 23). A chronology of “suffering and death” from TB provided the drama to this rendition, with a series of illustrations showing (1) a tubercular father coughing and spitting on the same floor on which his child crawls; (2) a child sick with TB;

TUBERCULOSIS PREVENTION.

Tuberculosis prevention was shown by a series of comparative pictures with text:

ONE SIDE SHOWING:	THE OTHER:
1. The open and well-ventilated house with person sleeping on the covered porch.	1. A closed and poorly ventilated house, person sleeping inside on the floor with dirty clothes and cooking utensils drawing flies.
2. Cigar making in clean room with cigars screened, stationary washstand, good ventilation, high work tables and spittoons.	2. Low tables with girls seated on or near the floor, no spittoons, a small window affording but the poorest ventilation, and no screens.
3. Boys and girls playing lawn tennis and exercising in open air.	3. Children playing inside the house on dirty floor, no ventilation, dog eating food scattered on floor and flies abounding.
4. Eating meals on high table, clean and with knives and forks, food screened from flies, good ventilation.	4. Eating food with fingers on low table, no screening from flies, baby and dog playing together on dirty floor, and stable just outside with direct fly communication to food.

These illustrations were shown for the purpose of teaching:

1. Sleeping with the windows open or outside means clean air, pure blood and good health.	1. Closed windows mean dirty air, and poisoned blood. This means death.
2. Work and study in pure air make mind and body alert.	2. Dirty dusty hot rooms are killing. Destructive to health and efficiency.
3. Play and exercise in clean open air. Keep out of doors as much as possible.	3. Indoor play and playing in dusty places is not healthful play. Exercise in dirty air is dangerous.
4. Eat clean nourishing food, protected from flies and dust.	4. Dirty food kills thousands. Flies and dust contaminate food.
5. Don't spit in public places. "No spit, no tuberculosis." Don't swap gum, apples, etc. There is spit on used gum. Don't put pencils or money in the mouth. There is spit on pencils and filth on money. Don't eat candy, fruit, or pastry that has been exposed to flies or dust; there are all kinds of germs on such. Don't sneeze or cough in another's face; don't let another infect you in this way.	

Fig. 3. Description of the “Tuberculosis Prevention” exhibit during the 1912 Manila Carnival

Source: Heiser 1913a, 28

(3) burial of the child; and finally (4) the death of the child mourned by the family “doomed in a childless home from which the last ray of hope had departed” (ibid., 23). Images of the evils of spitting were not only seen in the exhibits, but also on the carnival grounds as wherever participants went they were constantly reminded by big signs bearing the warning “Don’t Spit.”

The role of the fly as a vector for TB transmission was also emphasized in pamphlets and official circulars distributed among the population (figs. 4, 5, and 6). In these print materials the association between the fly and dangerous communicable diseases was buttressed by their equation with extreme filth. One circular bore the following:

All flies are filthy. They breed in filth. Their favorite food is excrement and garbage. From filthy deposits of these materials or from a deposit of sputum they will go directly and alight upon food to be eaten by human beings, carrying with them on all parts of their bodies the germs collected from these filthy sources. (Heiser 1913b, 44)

Such rendering, although obsolete by today’s etiological understanding, was suggestive of the effort to reinforce the perception that TB infection thrived in the absence of sanitation.

Flies Breed in Manure and Garbage	
THEY CARRY Cholera Dysentery Typhoid Fever Tuberculosis Pus-infections	Therefore bury or burn the material in which they breed
	Screen your food

Fig. 4. Inside flap of Health Bulletin No. 11: *Insects and Disease*

Source: Department of the Interior 1913, 2



Fig. 5. Health Bulletin No. 14, one of the print materials that health officials circulated to establish the tuberculosis-fly linkage

Source: Department of the Interior 1914

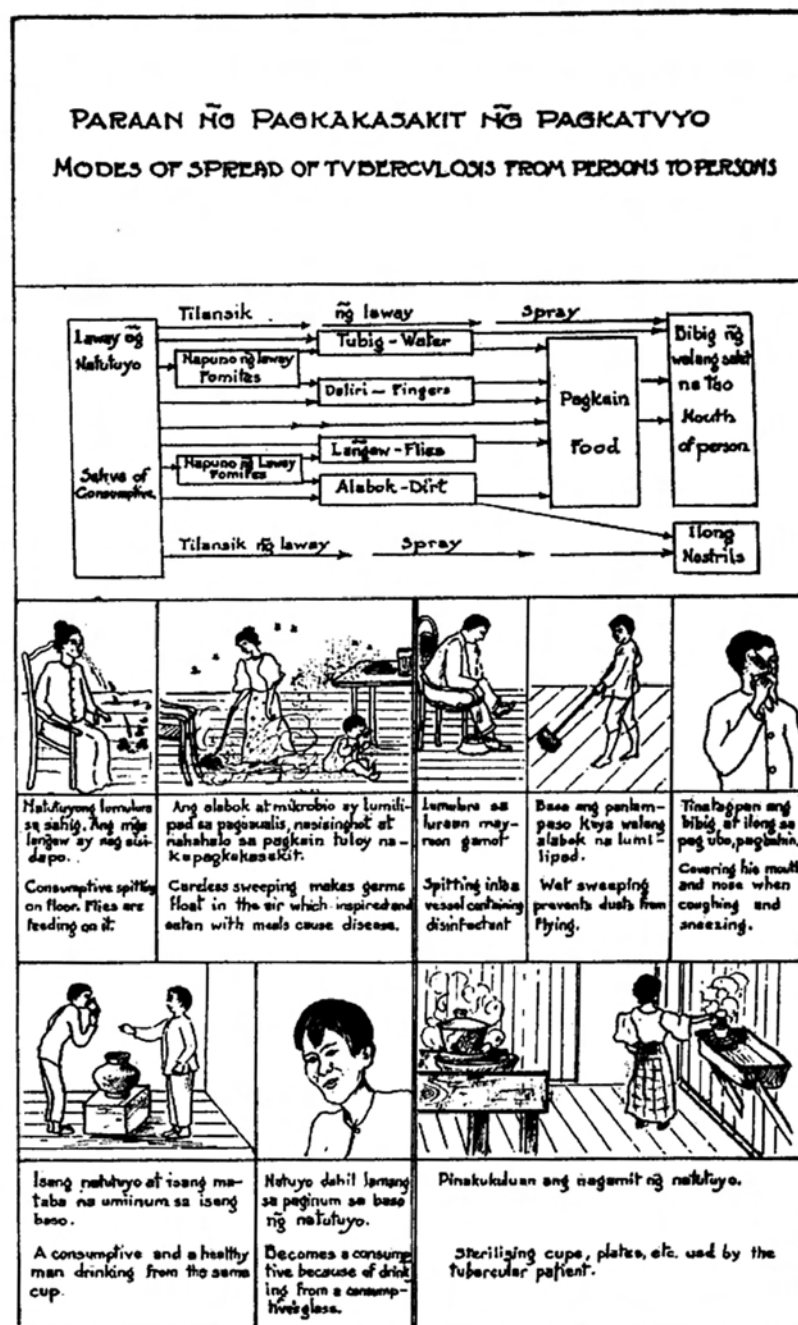


Fig. 6. Diagram illustrating the fly as one vehicle of TB transmission, inserted in a health almanac-calendar sanctioned by the Bureau of Health

Source: Tianco 1918, 43

Exclusionary Tactics in the Public Sector and Other State Institutions

By the 1910s the Bureau of Health exercised most of its clout in restricting the movement of tuberculars in the public sector and other state institutions. While tuberculars were already barred from applying to the civil service as early as 1908 (e.g., Heiser 1908, 45), those who wished to enter the Philippine Nursing School and even applicants for vehicle driving licenses were screened for TB (Heiser 1913b, 40–43). Sputum examination might have been essential, but in conducting the physical examination of the applicants, the screening committees were specifically told by the Bureau of Health to pay “special attention” to the chest area of the applicants. Anyone showing evidence of TB through checkup was immediately “recommended” for rejection (ibid., 43). Those rejected were referred to the PIAntiTBs and were recommended to seek treatment either at the San Juan TB Hospital, where sufferers of incipient TB went, or the San Lazaro Hospital, where those with advanced TB were sent. TB, like other communicable diseases, was seen by the colonial state as a source of handicap for government employees, one that rendered them dangerous to the workplace and to those they would encounter in the public sector.

Soon tuberculars entering the public sector became merely one aspect of the TB dilemma, as the Bureau of Health came to be aware that TB infection was prevalent even within their own ranks. By 1912 health officials learned that TB was as widespread among Bureau of Health employees as it was among civil service applicants. A significant number of assistant sanitary inspectors—most of whom were Filipinos—were found ill of TB. To address this situation, the Bureau of Health released a handbook to teach its personnel how to safeguard themselves against contagious diseases. It was especially problematic to deal with those who suffered from TB, because it was difficult to determine whether or not the illness of the personnel was the bureau’s responsibility. It was always possible that the personnel contracted TB prior to employment in the Bureau. Still, “there is always the chance that they may have contracted the disease in the line of duty” and as such “the Bureau hesitates to discharge these men, though they may not be capable of performing a full day’s work” (Heiser 1913a, 11). The estimated time of infection thus became a concern for health officials. “The period . . . between the examination and the date of actual appointment is sufficient for an applicant to become infected with tuberculosis although at the time

of the examination he may have been in a healthy condition” (ibid., 92). Hence, it was decided that physical exams should be conducted instead on those who were soon to be appointed.

Inspection of School Children

Tuberculosis soon became a basis for the expulsion of children from schools. Viewed by health officials as a “vital function of the public school system” and a means to maintain modern standards of education, medical inspection of public schools became regular, as a consequence of health officials’ concern regarding the incidence of infectious diseases among public school students. “No school can any longer claim a place in modern educational progress which ignores or neglects the health conditions of its pupils” (ibid., 63). With this outlook, which was also informed with the notion that some parents were unable to “appreciate” matters of health, the Bureau of Health saw it as imperative for the school department “to furnish not only a healthy school environment but also a careful guardianship of the personal health of its pupils” (ibid., 63).

In 1912 special regulations circulated in public schools indicated that communicable diseases, such as diphtheria, varicella, measles, and tuberculosis, were grounds for a student’s expulsion. When found with active TB, the student was immediately “excluded” from school and referred to the nearest health station, which in turn sent the student to any TB dispensary administered by the PIAntiTBS or the Bureau of Health (ibid., 66). The first round of inspection found 187 students were afflicted with TB; they were requested to seek treatment and were excused from schoolwork (Heiser 1913b, 58-59). By 1913 the medical inspector in Manila had found TB cases in all schools he inspected in the city, and reported that the presence of TB was “one of the most troublesome problems” in the public school system (ibid., 58). The inspector then recommended the establishment of open-air schools for the treatment of tuberculous and anemic children, together with special buildings and dormitories to which additional teachers and nurses would be stationed (ibid., 58). Subsequent reports revealed an exponential decrease of children found to be afflicted with TB, which could explain why there was no mention of the implementation of any of the medical inspector’s suggestions. While this leads one to believe that the regular inspection effectively sent all TB-afflicted students to proper bed rest, there was still a huge possibility that children discontinued schooling upon learning about their ailment.

Exclusion of the Tubercular from Manila Dance Halls

In July 1913 the municipal board of Manila enacted the “Dance Hall Ordinance,” effectively prohibiting those afflicted with communicable diseases, including tuberculars, from entering dance halls in the city. In a way, this ordinance was the first measure to actively carry out exclusionary tactics in a defined public space outside state-controlled institutions. According to the Bureau of Health report, “It is a well-known fact that dance halls are an important factor in the spread of the above-mentioned class of [communicable] diseases, which, when once contracted, frequently entail upon the sufferer long periods of illness and inability to earn a livelihood” (ibid., 11). Interestingly, this exclusionary tactic had a gender bias: it particularly targeted females and required them to show upon entering a certificate issued by a designated health station indicating their health and absence of history of infection. The ordinance also made it unlawful for the owner or any person in charge of a public dance hall to admit females who had failed to show a health certificate.

But before 1913 ended, the ordinance had become a complete failure. Most women refused to be screened. Those who were prohibited in Manila went instead to dance halls in the adjacent province of Rizal. In response, health officials requested that a similar ordinance be put into effect by the Rizal provincial board. While some avoided medical screening, others actually agreed to be examined, and much to the surprise of health officials a large number were diagnosed not with tuberculosis but with venereal diseases (Heiser 1914, 22). Particularly alarming the health officials was the disease *gonorrheal ophthalmia*, a gonococcal infection of the eye resulting from contact with genital discharge of a person with gonorrhea (ibid., 64). The Bureau of Health launched an awareness campaign consisting of the public showing of photos of the afflicted through lantern slides that bear “proper explanatory notices” (ibid., 64). With all the possible embarrassment that this measure might have caused the afflicted, it was not surprising that a “rapid decline” in the number of reported cases was observed in a span of four months (ibid., 67).

Surveillance in the Provinces

The relative waning of epidemic diseases in Manila permitted the Bureau of Health to focus its attention to areas that previously it had not reached. District health officers were sent to conduct inspection trips in provinces and municipalities throughout the Islands.

One of the tasks of district health officers was to supervise sanitation in provincial prisons and jails. On top of mundane concerns, such as regular baths of the prisoners, maintenance of clean water supply, hygienic food handling, and proper disposal of garbage and excreta, health officers also supervised the prisons' direct responses to the prevalence of tuberculosis. The prohibition of spitting and the provision of spittoons were a must. Moreover health officers actively looked for tubercular prisoners and those suspected to have TB, supervised their isolation, and facilitated the disinfection of their places of confinement (Heiser 1913a, 22). Health officers were also obliged to send samples of the tubercular prisoner's sputum to Manila for laboratory examination.

Outside the prison grounds the same approach was adopted. District health officers were also on the lookout for anyone who manifested symptoms of TB. While municipal water supplies, cemeteries, artisan wells, and factories were inspected for any signs of the unsanitary, the attention of the health officer was called right away in cases of overcrowding and the presence of tuberculosis as well as other infectious diseases. The sputum of the suspected tubercular was also sent to Manila for laboratory testing (*ibid.*, 60). The Bureau of Science had specific instructions for the proper handling of suspected sputa: "Sputum for examination for tubercle bacillus will keep indefinitely without any preservative . . . it should be sent in a small bottle, preferably with a wide mouth, wrapped in cotton and put into a small box or section of bamboo" (*ibid.*, 21).

With a squad of eager health officers regularly detailed in various places throughout the Islands, the benefits (or nuisance, as some locals viewed it) of TB measures as well as other kinds of public health services were felt in places with no previous access to them. This came along as public health services acquired a larger scope with the enactment of the "Fajardo Act" in 1912, which paved the way for the systematic creation of "sanitary divisions" and "boards of health" in municipalities and provinces—an effort that renewed the American colonial state's attempt to establish its public health order on a national scale, which initially failed in the midst of the 1902 cholera epidemic (e.g., Iletto 1988).

Concomitant with the increased visibility of district health officers was the deployment of nurses outside Manila. New nursing graduates were largely responsible for providing instruction on disease prevention, proper infant care, and hygiene and sanitation in the provinces, and were also com-

missioned to assist health officers in detecting TB sufferers in communities. Nurses were told by the Bureau of Health to pay special attention to those suspected of having TB: "Where tuberculosis is known to be in any house the nurse will make an effort to meet the patient and instruct him in proper hygienic measures in order that he may make a recovery and to prevent the spread of the disease to friends, relatives, or others" (Heiser 1913a, 108).

The Prison System as a Site of Segregation

By 1912 the tuberculosis dilemma had also beleaguered the Iwahig Penal Colony in Palawan. In response, facilities for tuberculars were expanded in the penal colony. Two additional pavilions, which could accommodate up to fifty patients, were completed in 1912, in addition to a number of TB cottages being constructed in a barrio tucked a mile away from the main prison station. A nearby site was soon chosen as a feasible location for a proposed small-scale "tuberculosis colony" for tubercular prisoners. By 1914 some sixty-three Iwahig prisoners had been transferred to the colony (Heiser 1915, 73).

Back in Manila, amid the fact that a separate hospital exclusive for tuberculous prisoners had been in service in Bilibid since 1905, the high prevalence of TB continued to be a problem in the prison. Bilibid administrators had asked for the transfer of their tubercular prisoners to Iwahig (Heiser 1913b, 101). They regarded Iwahig as a salubrious place for tuberculars, obviously because of its open-air setting, and advised that if it would take tuberculous prisoners from Bilibid they could be ordered to work instead of having them stay in the prison hospital. The director of Bilibid appealed to health officials that tubercular prisoners, if taken to Iwahig, would at least be given "a chance to remain well instead of relapsing as is so frequently the case with those who are discharged from the tubercular hospital at Bilibid to live again in necessarily cramped quarters with the remaining prisoners and endanger them as well" (*ibid.*). In 1915 an actual transfer of tubercular prisoners from Bilibid to Iwahig took place. But this involved only a small number of tubercular prisoners, and due to a number of state restrictions no large-scale transfer was ever facilitated (Long 1916, 21). Amid the temporary reprieve from a number of small-scale interprovincial transfers, TB remained a problem in Bilibid.

It cannot be emphasized enough how serious tuberculosis prevalence was in Bilibid. In 1913 TB was so prevalent in the prison that sick prisoners

had been described in official reports as either “tubercular” or “non-tubercular” (Heiser 1914, 128). Obviously high mortality statistics from any disease posed a bureaucratic problem to the chief of the Bilibid Hospital division. “If deaths from tuberculosis were eliminated, the mortality rate would be surprisingly low,” he surmised (Heiser 1913b, 156). Perhaps wanting to deflect the blame over the huge number of tubercular prisoners, he contended that a number of prisoners had been afflicted with TB before being detained. After all, TB was a common problem in all state institutions, and, although Bilibid had always had the perennial problem of overcrowding, the prison management according to the hospital division chief was not to be fully blamed for it (*ibid.*, 156).

Nonetheless, the high TB mortality statistics in Bilibid was still a problem that had to be addressed. In the name of the gospel of proper hygiene (and, obviously, in the name of the benevolent colonial project), health measures continued to be carried out in the prison. The antisput campaign became pronounced in prison sanitation—spitting was prohibited in prison grounds, and metal cuspidors and spittoons were provided. A regular outdoor exercise regimen was imposed on prisoners in the hope of bringing about “greater lung expansion” to tubercular as well as convalescing prisoners (Heiser 1913a, 110). A number of presidio rooms for women inmates and regular cell houses were renovated to facilitate proper ventilation. To avoid the spread of dust, wooden floors in the prison workshop were concretized and prison grounds were covered with gravel, which had to be sprinkled with water regularly. When dust from the prison yard still accumulated in mess pans, a cleaning system would meticulously “disinfect” them (Long 1917a, 25). Bed covers were regularly steamed. Finally, the prison foreman was put in charge of matters concerning TB and was held responsible for the reporting of the infected and for advising his fellow inmates to refrain from spitting on the floor and grounds (Heiser 1914, 129).

Filipinization of the Colonial Bureaucracy

The relationship between the colonial state and the quasi-state ally organization was shaped by factors other than a seemingly noble intent to control a disease. Colonial politics largely impinged on the conduct of disease control. In 1913 when calls were starting to be made for the transfer of colonial bureaucratic positions to Filipinos, the PIAntiTBs’s work received a serious blow with the uncalled resignation of the Society president Eleanor Egan,

the head physician of the San Juan TB Hospital, and several members of the council who had to leave for the United States. The remaining members had held no meetings as late as the following year (Heiser 1914, 43). With the operations of the Society in disarray, Director of Health Victor Heiser recommended at one point that some arrangements should be made for a rechanneling of the expenditure of government funds, and that the PIAntiTBs “should be reorganized or the [antituberculosis] work be placed under charge of a government bureau” (*ibid.*, 43). Heiser did not stay long enough to act on his suggestion as he also had to leave his post upon the implementation of the “Filipinization” of the colonial bureaucracy in 1914.

The Filipinization’s direct effect on public health was obviously the departure of a significant number of high-profile health officials. As far as the antituberculosis work was concerned, the commencement of the Filipinization campaign in 1914 can also be considered as a watershed event. It coincided with the sharp reduction in the government allocation to the PIAntiTBs. During that year, the Society received only P25,000—half of the original amount it had been given by the colonial legislature. It would not be hard to imagine that this new financial setup undermined the Society’s publicity work, as well as the maintenance of its dispensaries and its provincial divisions. By 1916 the San Juan TB Hospital was closed.

Available sources that provide testimony to these episodes are limited as to the full extent of Filipinization’s direct effects. One only learns about the halving of the Society’s budget as well as the closing of the TB hospital from sources published in later years. Mention of the budget reduction can be found only in three documents—a 1916 speech of the Society’s president, a 1932 letter sent by the Society’s president to Senate Pres. Manuel L. Quezon, and a 1933 state report—all of which bear no explanation as to the details behind it (*Philippines Free Press* 1916a; Vargas 1932; Tuberculosis Commission 1933, 24). As regards the closing of the San Juan TB Hospital, while post-1916 reports hint that it had been replaced by a new sanatorium, the earliest and definitive text that mentioned its closing is found in the *History of Nursing in the Philippines* authored by Anastacia Giron-Tupas (1961), attributing it to the decrease of government support for the Society. Moreover, Giron-Tupas (1961, 68) reports that, in lieu of the San Juan TB Hospital, another clinic was put up along Azcarraga Street in Manila, “making three dispensaries in actual operation then, under the auspices of the Society.”

However, the sources do not say if the budget reduction and the TB hospital closure were the result of colonial reorganization—hence the responsibility of the colonial government—or a bureaucratic response to the failure of the remaining PIAntiTBS members to continue its work after the departure of Egan and the head physician.

Nevertheless, the PIAntiTBS was able to carry on with its work. A newly elected council finally convened in 1916. The new president of the Society, Dr. Sixto de los Angeles, lamented the halving of funds the organization had received from the government. He remarked that the activities of the Society could not be carried out even with “medium effectiveness” and called for the cooperation of not only the PIAntiTBS and the Philippine Health Service to carry out the antituberculosis work but of a number of government agencies and other semiprivate organizations. In spite of the new financial setup between the Society and the government, De los Angeles reaffirmed the already existing rationale of the tuberculosis campaign, underscoring the need for measures pertaining to education, prevention, and cooperation (*Philippines Free Press* 1916a, 27). In a way, the Society was also Filipinized with De los Angeles’s appointment as the new PIAntiTBS president, attesting to the Society’s success in enticing Filipino doctors to participate in the disease control enterprise.

Soon the new PIAntiTBS officers made plans to replace the TB hospital and considered feasible locations for the new sanatorium (*Philippines Free Press* 1916b, 9). Available sources show few details about the plans for the new sanatorium. What can be ascertained is that the colonial government was no longer as active in the new plans as it was in the construction of the San Juan TB Hospital in 1910. While there was mention in the *Philippines Free Press* (1916b, 9) of the involvement of Dr. William Musgrave, who was at one time part of the Bureau of Health, no mention can be found in the official reports about the closing of the TB hospital, or the plans for the construction of a new sanatorium. In the official health reports, no appropriation act was ever enacted to fund a new sanatorium.

Even without government funding, the PIAntiTBS was able to complete the construction of a new sanatorium in Santol, Santa Mesa, in December 1918.⁵ According to later sources, at its inauguration the sanatorium was comprised of a number of nipa cottages, which could accommodate only forty patients (Ty 1939, 7; cf. Giron-Tupas 1961, 69). This was way below the capacity of the old TB hospital, which could accommodate about thirty

incipient cases and about a hundred “campers” (Heiser 1910, 93). The Society could have completed the new sanatorium only through donations from its patrons.

What accounted for the noninvolvement of the colonial state in the establishment of the Santol Sanatorium is rather unclear. Although it is tempting to speculate that a possible aftermath of Filipinization was the Bureau of Health’s impeded capacity to fund semiprivate initiatives, there were indications that the bureau did not experience any big changes as regard its finances. When the budget of the PIAntiTBS budget was halved in 1914, the total amount given to affiliated charitable institutions even increased from P60,000 in 1912 to P70,000 (Heiser 1915, 94).

However, what is telling in this new development was the fact that, despite the noninvolvement of the Philippine Health Service (created in 1915 to supersede the Bureau of Health) in the efforts to replace the San Juan TB Hospital, health officials still felt the need to expand facilities for tuberculosis. In 1917 a TB hospital was constructed on the grounds of the state-owned San Lazaro Hospital. The new San Lazaro TB Hospital was very similar to the old San Juan TB Hospital—according to reports, it was constructed after a short period of sixty-three days, at a cost of P23,000, and could accommodate 125 patients upon its completion (Long 1918a, 7). The available sources offer only a limited explanation behind the construction of the new TB hospital, but this episode cannot be read entirely as a gesture of the Philippine Health Service abandoning a sanatorium-based approach to education and treatment of incipient tuberculars. San Lazaro Hospital had been designated since the construction of the San Juan TB Hospital as the destination of those suffering from advanced TB, and the construction of a new TB hospital on its grounds in 1917 might have resulted from the need to accommodate a growing number of tuberculars who were considered to have no chance of recovery.

Urbanization as a Determinant in the Rise of TB Mortality

In 1917 the Philippine Health Service hired L. R. Thompson, a “Passed Assistant Surgeon” of the United States Public Health Service, to conduct a study of the public health conditions in Manila with a particular focus on TB. Apparently health officials soon realized that the general mortality in the city was not declining as they had expected. Bureau of Health reports had

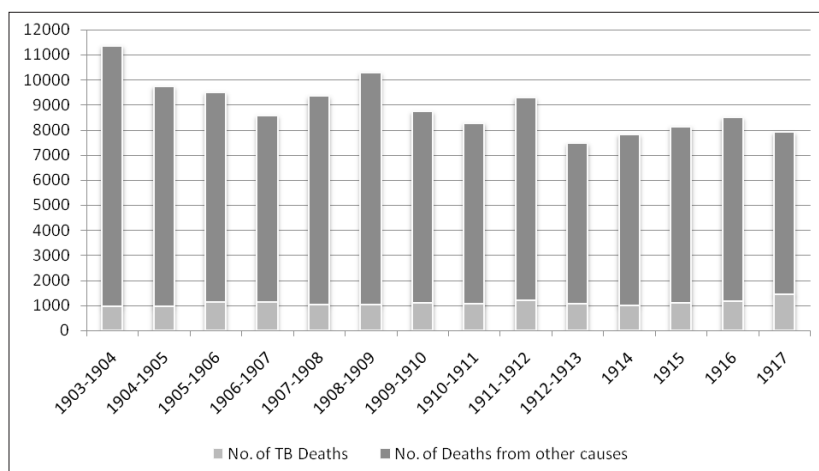


Fig. 7. Total recorded mortality in Manila, among residents and transients, 1903–1917

Calculated based on data from: Bureau of Public Health 1905, 93–4; Bureau of Health 1906, 101–2; Heiser 1906, 64; Heiser 1907, 118–19; Heiser 1908, 118–19; Heiser 1909, 120–21; Heiser 1910, 120–21; Fox 1911, 61–62; Heiser 1913a, 125–26; Heiser 1913b, 206–07; Heiser 1914, 255–56; Heiser 1915, 101–2; Long 1916, 75–6; Long 1917a, 179–80; Long 1918a, 181–82

recorded a steady increase in general mortality in the city from 1913 onward. Although a slight decrease was observed in 1917, it was not a sign of promise for health officials, who suspected that the unsatisfactory mortality rates in the city had to do with the unabated TB mortality that had not gone below the 1,000 death mark ever since 1903 (fig. 6). Thompson’s study would serve to verify this suspicion. Director of Health J. D. Long (1917b) stated:

For more than a year past the Philippine Health Service has been aware that, in spite of the most intensive health work the city of Manila has even [*sic*] known, the death rate was slowly but surely increasing. It was felt that tuberculosis was one of the principal causes, but until an intensive study was made, no definite recommendation could be formulated.

Indeed tuberculosis was regarded in the Thompson report as a chief factor in the unabated death rate in Manila. Thompson (1917, 2) observed that, while there had been a steady, albeit slight, increase in the general death rate in the city since 1913, there had been a “complete disappearance of, or

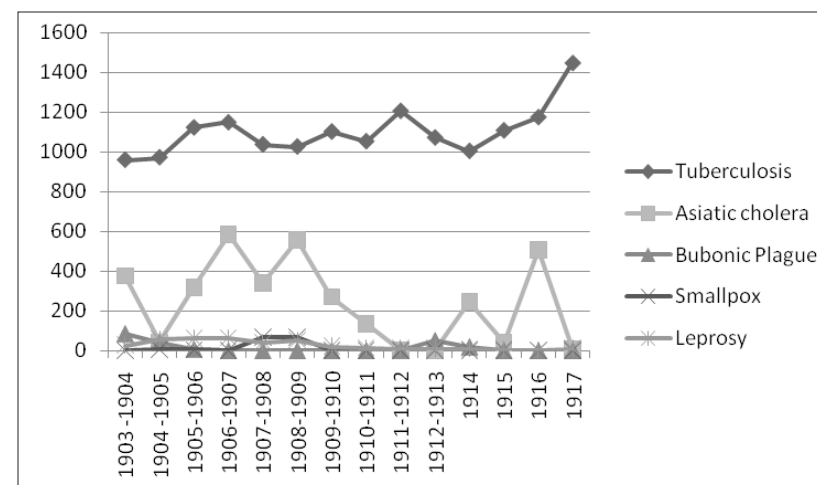


Fig. 8. Total recorded mortality among residents in Manila from tuberculosis, Asiatic cholera, bubonic plague, smallpox, and leprosy, 1903–1917

Calculated based on data from: Bureau of Public Health 1905, 97; Bureau of Health 1906, 103–106; Heiser 1906, 65–68; Heiser 1907, 120–123; Heiser 1908, 120–123; Heiser 1909, 123–126; Heiser 1910, 123–126; Fox 1911, 63–66; Heiser 1913a, 128–132; Heiser 1913b, 207–211; Heiser 1914, 256–259; Heiser 1915, 103–106; Long 1916, 77–80; Long 1917a, 180–184; Long 1918a, 183

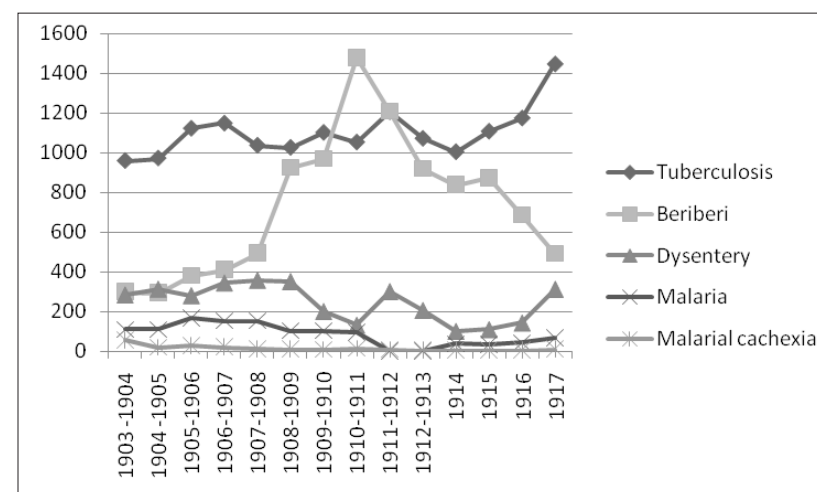


Fig. 9. Total recorded mortality among residents in Manila from tuberculosis, beriberi, dysentery, malaria, and malarial cachexia, 1903–1917

Calculated based on data from sources listed in fig. 8

marked diminution in, other infectious diseases.” The TB mortality rate in Manila was also twice that of the provinces “where sanitary measures are less intensive, but where overcrowding does not exist.” Health reports showed that TB had since incurred greater mortalities in the city than did cholera, bubonic plague, smallpox, and leprosy (fig. 7). TB mortality was also greater than the mortality from other prevalent diseases such as beriberi, dysentery, and malaria (fig. 8). It was only surpassed from 1910 to 1911 by beriberi, a vitamin B1 or thiamine deficiency. Health officials had since promoted the use of unpolished rice, with its larger amounts of vitamin B1, and attempted to discourage the production and consumption of polished rice through various means, from taxation to awareness campaigns. The incidence of the disease had since declined. Unfortunately, health officials never saw a significant decline in the incidence of tuberculosis.

The Thompson report also mentioned that the problem of Manila regarding overcrowding, which had to do largely with the steady and rapid increase in population without a compensatory increase in available living space, had aggravated the prevalence of TB. It stated that some sections of the city had become so densely populated that “houses (were) so closely packed together that one must turn sideways to walk between them” (ibid.). This was compounded by the absence of streets or alleys. In many houses, sunlight could not enter directly. Some were very overcrowded, with a single room occupied by up to four families, a situation that was very conducive to the propagation of TB. “The effect upon the propagation and spread of tuberculosis can be well understood when it is recalled that it is essentially a disease dependent upon direct or indirect personal contact” (ibid.).

Thompson was cognizant that population increase had resulted from the continued immigration of people from the provinces. This is easily attributed to the economic setup of the American Philippines, which had begun to unravel during the second decade of occupation. Since the actualization of free trade policies in 1909 between the Islands and the United States, foreign demand for Philippine commodity exports had become more and more the organizing principle of the national economy. The export sector expanded, resulting in unprecedented career mobility for Filipinos of various classes. Manila’s urban economy played a lead role in this setup—national production in factories, both mechanized and manual labor, became highly concentrated in the city and its adjacent areas. According to Daniel Doeppers (1984, 8), in aggregate the population of greater Manila was significantly

better off than the rest of the country due to the disproportionate concentration of middle-income occupations in the city. Logically this escalated the flow of in-migration from the provinces to the metropolis. In 1918, although Manila was only the tenth most populated city as recorded by the second American-sponsored census, the city was the most densely populated in the Islands with 20,739 inhabitants per square mile, forty-one times that of Ilocos Sur, which was ranked as the second most densely populated (Census Office of the Philippine Islands 1921, 22). For TB control efforts, the exigencies of urbanization were recipes for an increase in tuberculosis incidence and mortality. A high population density made the transmission of tuberculosis very favorable, thus the making of a major public health concern.

As soon as copies of the Thompson report reached a number of officials of the insular government, its findings caused panic among colonial bureaucrats and health officials. Writing to Senate Pres. Manuel L. Quezon, the Secretary of Public Instruction (1917) expressed his reaction upon reading the report, “I was greatly shocked at the unusual and dangerous prevalence of tuberculosis in this city. That something should be done to remedy this condition is beyond controversy or discussion. The only question therefore, it seems to me, is what means should be taken to reduce or suppress this disease.” The Senate President, who would himself succumb to tuberculosis three decades later, replied succinctly, “The question will receive the most serious attention of the Senate which it deserves” (Quezon 1917).

The Attempt at Wide-Scale Segregation: The Tuberculosis Barrio

In 1917, perhaps as a result of the Thompson report, the Philippine Health Service contemplated the putting up a TB colony that would facilitate the massive Islands-wide segregation of tuberculars. In January 1918, E. L. Barber (1918), Chief of the Office of the Sanitary Engineering of the Philippine Health Service, sent J. D. Long a detailed proposal for a “Tuberculosis Sanitary Barrio.” Long gave Barber’s plan his full support.

The tuberculosis barrio was envisioned to embody the colonial ideal of salubrity, the extreme opposite of the urban scene of real Manila. Its houses would be set up differently from that of the capital’s cramped dwellings and tenement houses. About a thousand houses would comprise the barrio, with each house located on a standard sized lot of 12 meters by 15 meters. Forty-eight lots would comprise a block, which would be divided by a five-meter

alley. In the aggregate, the entire area of the barrio would be 275,000 square meters, with a total street area of 70,380 square meters. Manila was conveniently chosen as the location of the initial experiment “on account of the fact that it is readily accessible, can be more carefully supervised, and there will be more assurance of success; also on account of the fact that the death rate from TB in Manila is double that of the provinces” (ibid., 7).

On paper it was called the Tuberculosis Barrio, but Director of Health J. D. Long called it a “colony” in the same way that health officials referred to the facility for leprosy persons in Culion, Palawan. However, the admission of tuberculars in the TB Barrio would be quite different from that employed at Culion. Long claimed that, as soon as the construction of the TB Barrio started, the Philippine Health Service would conduct immediately a tuberculosis survey in the city of Manila to register the names and addresses of all those afflicted with TB. Its future occupants would not be admitted to the barrio forcibly. Long (1918b, 4–5) stated:

No force or compulsion will be used in any way whatsoever, but the advantages from both the sanitary and economic standpoints will be pointed out to each individual. If any individual states that he does not want to enter the colony, he will be allowed to remain in his home, will be given advice as to how to take care of himself and to protect other members of his family from infection.

Apparently, the admission of the tuberculars to the TB Barrio would be conducted within the framework of colonial “engagement,” even among those who were unaware of the benefits of having themselves admitted to the facility. Long (1918b, 5) added:

If within a year infection develops in another member of the family that has previously shown no disease, the infected individual will be given the option of entering the colony or entering at his own expense some other institution that is adequately equipped to care for him and to protect other persons from becoming infected.

Given the degree of freedom conferred to the tubercular in deciding whether or not to be admitted, there was no certainty that the tuberculosis barrio would efficiently function to segregate the tuberculars from the

healthy population of Manila. Without forcible admission, the tubercular could easily choose to stay home instead. But Long was confident that several tuberculars would admit themselves voluntarily. Apparently, from Long’s point of view, public health measures had been gaining ground in acquiring public support. This confidence was informed by the results of the latest epidemic measures, which were characterized by a critical mass consenting to the legitimacy and benefits of isolation and hospitalization. Long (ibid.) stated:

It is firmly believed, based on the fact that fifty two percent of cholera cases voluntarily presented themselves at the hospital during the last outbreak, and on the general tendency which now exists among all classes to report communicable disease of every kind immediately upon occurrence, that within a few months after the opening of the colony the same will be full and that there will be a waiting list of persons desirous of entering when vacancies occur.

Admission to the proposed TB Barrio would not separate the afflicted from his or her families, nor would tuberculars be compelled to discontinue working. Due to the clean and sanitary surroundings, constant medical and nursing supervision, and the supervised wholesome and balanced diet, each admitted tubercular would “have the best opportunity to recover from the disease while continuing his industrial activities and will assure that the community will be protected from the possibility that others will become infected” (ibid., 6). But it was certain that the tubercular would be subjected to a stringent disciplinary regimen, particularly in regard to spit disposal. Long (1918b, 5–6) stated, “Every laborer or other person having tuberculosis, however, will be required to carry a sputum cup, to use the same at all times, and upon return to the colony at night to deliver same with its contents to a central disinfection station and receive a clean one in exchange.” Also the colony’s residents would be regularly given instructions on personal hygiene, cleanliness, and “other measures to be taken for the protection of the individual and the avoidance of infection of others” (ibid.).

The TB Barrio was envisioned to be self-reliant and unlike Culion would actually generate revenue on its own. Long declared, “industries will be started within the colony in the manufacture and production of such articles as can be readily marketed and which will provide the women and

children with useful occupation and a constant income to assist the husband in the maintenance of the family” (ibid., 6–7). The income of the colony, according to Long, could be used for “redemption of capital and for maintenance, upkeep or repairs, should the project be confined to the city of Manila alone, the capital will be redeemed in less than fifteen years” (ibid., 7). For children who would live in the TB Barrio a school would be provided. Long gave the assurance that the barrio would not be a waste of government money, while emphasizing the utmost necessity of putting up the barrio. He stated,

The capital required, P1.5 million, is only P250 thousand more than was required for the elimination of smallpox, and less than half of that required for the control of leprosy to date. Whereas in the measures against smallpox, leprosy and cholera, no cash return was obtained, if the plan as outlined for the control is followed, not only will the capital be eventually returned, but there will be a later constant income. (ibid.)

Finally Long argued that, between the two pressing health problems during that time (TB and dysentery), TB was left to be addressed separately by sanitary measures. Dysentery and other diarrheal diseases were considered to be on the way of being addressed by the installation of sewerage systems and “Antipolo type” toilets (ibid., 8). Long also gave the assurance that existing TB measures would not be obstructed by the construction of the colony. The colony would address “at least only active infective cases” while those who were “incipient, latent, and arrested cases” would still be handled by the facilities of the PIAntiTBS or other related antituberculosis work (ibid.).

Despite these assurances and the intricate details of the proposal crafted by Barber, the tuberculosis barrio was not constructed. The official health report for 1918 did not mention anything at all about the proposed facility. Perhaps, given that no official report mentioned any further discussion of the proposal, it can be surmised that a more pressing public health problem caught the health officials’ undivided attention. The mortality statistics for TB were no match to those caused by the influenza epidemic (locally called the *trancazo* epidemic) which appeared in two waves in 1918 and left about 85,000 dead at the end of the year (Long 1919, 3–6; cf. Gealogo this issue). Aside from the devastation of the worldwide epidemic in the Islands, the appearance of cholera and a resurgence of smallpox were also

felt during the year. Collectively, these diseases made 1918 a bad year for public health.

Other factors could have sidelined plans for the TB Barrio. It was possible that Filipinization might have created some bureaucratic obstacles to the disbursement of the funds needed for its construction. Given the limited information from available sources, it can be argued that the public health nightmare experienced in 1918 could have been sufficient to thwart the actualization of another capital-intensive segregation facility.

Conclusion

The year 1910 was regarded in health reports as the advent of the “systematic” campaign against tuberculosis. Since then, the campaign had been referred often as “largely in the hands” of the Philippine Islands Antituberculosis Society, indicating that the public health component of the colonial state was merely playing a secondary role. Indeed health officials of the American Philippines did not see themselves as taking the conventional role they had assumed in previous disease control enterprises. In tuberculosis control, they had to play a complementary role in a partnership that emerged between the “state” and “society.” The colonial state, in its limited capacity, strived to restrain the population through attempts at exclusion, segregation, and surveillance, while the antituberculosis society led the engagement with society by reforming the habits of the colonized. The plethora of health measures had to do not so much with the active administration of a cure or the forcible stoppage of the disease’s rapid spread through contact infection, but with the ultimate aim to modify the population’s behavior and attitudes, which the colonial state deemed “unsanitary,” hence inimical to the wellbeing of the colonial polity.

Filipinization—which was a broader form of engagement with the colonized—ironically changed this partnership, mainly in regard to the financial setup that had previously sustained a “harmonious” alliance between the state and the PIAntiTBS. However, the emerging view that increased urbanization would aggravate the tuberculosis problem could also have reconfigured the framework of the campaign as the colonial state momentarily opted for wide-scale segregation. Evidently the epidemics of 1918 intervened and sidestepped the plan to set up a tuberculosis barrio.

In subsequent years, the framework with which the antituberculosis campaign commenced in 1910 remained unchanged. Health officials

soon became more convinced than before that continued in-migration to the capital Manila and the attendant increase in population density were clear factors in the rise in TB mortality and morbidity in the Islands. Nevertheless, because 1918 shifted the health officials' focus elsewhere, these epidemiological factors could easily have been embedded within the previous understanding of the unfavorable effects of cramped dwellings and improper ventilation in weakening people's immunity to tuberculosis. Consequently the PIAntiTBS continued to lead the ongoing engagement in reforming behavior and attitudes, while the colonial state continued with its extant interventionist measures. Indicative of the continuity in the earlier strategy was the persistence of the sanatorium approach to institutional care of tuberculars. The establishment of the Santol Sanatorium as a most essential public health facility replacing the botched Tuberculosis Sanitary Barrio served as testament to how the reformatory character of the antituberculosis campaign was maintained instead of acquiring a new framework for tackling the disease.

These developments reveal a disease control enterprise that provided ample space for the agencies of both the colonial state and the society. The narrative diverges from most other accounts that focus exclusively on the role of state actors in epidemic outbreaks to elucidate the hidden tensions between the colonizer and the colonized. Yet, the story of the campaign against TB, a chronic disease that had none of the usual dramas of the epidemics that plagued the American Philippines, was equally instructive in revealing the dynamics between the colonial state and the colonized society. The story of TB control from 1910 to 1918 was one in which the colonial state, amid its self-assurance over its public health regime and microbiology, gauged its limited capabilities to address a chronic disease, and thus had to rely on a group of native elites to engage with and reform what was deemed as the recalcitrance of the locals. When mortality rates did not subside, medical pundits desperately attempted to try a new framework based on wide-scale segregation, but were forced to revert back to the previous strategy due to unexpected events. There remained no promise of success in controlling an elusive killer⁶—and eventually the PIAntiTBS had to abandon its wishful motto—tacitly undermining the triumphalist claims of the American colonial public health regime in the Islands.

Notes

This article is a revised version of the paper that was presented at the conference "Public Health and Medicine in the Twentieth-Century Philippines: An Interdisciplinary Conference," at Ateneo de Manila University, Quezon City, 21–22 July 2008.

- 1 Robert Koch's discoveries in the late nineteenth century, attributing tuberculosis to the tubercle bacillus, informed the colonial officials who sought to control the chronic respiratory disease in the Islands (see Risse 1993, 19; Johnston 1993, 1059–68). In the absence of a proven cure, medical personnel could only prescribe nutritious diet, exercise, and fresh air in order to treat patients. In 1924 the Bacillus Calmette Guerin (BCG) vaccine was the subject of experiments in the French territories of Southeast Asia, such as Saigon-Cholon and Phnom Penh, but the Americans were not keen in using it (cf. Monnais 2006).
- 2 One quasi-state organization that predated the Philippine Islands Antituberculosis Society was La Liga Nacional Filipina Para la Protección de la Primera Infancia. This organization was formed as a means to address the high mortality rate from "infantile convulsion" (called "infant mortality" in other reports), which was not a bacteriologically-induced disease but a medical condition covering a number of diseases contracted by infants. The formation of the two organizations was similar in regard to the campaign that infantile convulsion and tuberculosis elicited—both campaigns were based on education and behavioral modification. La Liga preached the benefits of breast-feeding and proper care of newborn children (see McElhinny this issue).
- 3 In some ways, the narrative of the antituberculosis campaign during the first decade of the American colonial rule paralleled the political contours of the colonial project itself. The founding of the PIAntiTBS could be compared to the founding in 1907 of the Philippine Assembly, which served as the lower house of the colonial legislature tasked to mediate between the American colonial state and the colonized population. As much as both the assembly and the antituberculosis society acted as vehicles for the transmission of Western ideas—the former transmitted ideas of American-style republican governance, while the latter transmitted hygienic virtues based on antituberculosis approaches informed by germ theory—they were concessions given to the upper stratum of colonial society in order to entice their compatriots to legitimize the colonial project.
- 4 The term sputa, or its singular form sputum, refers to any matter expectorated from the lungs and the respiratory passages such as saliva, phlegm, mucus, or pus.
- 5 The Santol Sanatorium in Santa Mesa was named Quezon Institute in 1938. It is still in its original location in present-day Quezon City.
- 6 Effective drug therapies emerged only in 1944 when streptomycin was discovered to inhibit the tubercle bacilli. Other drugs soon followed such as the *para*-aminosalicylic acid (PAS) and isoniazid (isonicotinic acid hydrazide or INH), which were formulated in 1946 and 1952, respectively (Johnston 1993, 1059).

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Aaron Rom O. Moralina is a graduate student in the Department of History, Leong Hall, School of Social Sciences, Ateneo de Manila University, Loyola Heights, Quezon City 1108, Philippines. He teaches twentieth-century Philippine history in undergraduate courses offered by the History Department. He is finishing his M.A. thesis on the history of tuberculosis control in the American Philippines from 1898 to 1946. <amoralina@ateneo.edu>