

Case 4

Curing and Preventing Disease and Promoting Public Health

Rockefeller Foundation, 1909

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Background. By the 1890s, John D. Rockefeller's personal wealth from his oil business was burgeoning. Rockefeller had long been committed to charitable work due in large part to his lifelong religious devotion. This charitable impulse, however, prompted numerous charitable requests, and these requests eventually began to overwhelm his capacity to examine each request and to maintain his business enterprises. In 1892, Rockefeller appointed Frederick T. Gates, a former Baptist minister and administrator of the American Baptist Education Society, to advise and direct his philanthropic activities.⁶⁰

Rockefeller first became acquainted with Gates when he assisted in Rockefeller's creation of the University of Chicago. Education, however, would not be the central area toward which Gates would steer Rockefeller's charity. On a summer holiday in 1897, Gates read William Osler's *Principles and Practices of Medicine* and was so profoundly influenced by the prospects for medical advances and the consequential alleviation of suffering that he persuaded Rockefeller to make medicine the top priority of his philanthropic endeavors.⁶¹ His first inspiration, a center for research in medicine, was the Rockefeller Institute for Medical Research, later renamed Rockefeller University.

Through the work of another Rockefeller philanthropic organization, the General Education Board, Gates was introduced to the Dr. Charles Stiles, a zoologist and public health official. Stiles strongly advocated for action to combat the hookworm disease in the American South, an affliction by which victims are infected when small worms entered the bloodstream by boring through the victims' bare feet. The primary symptom was loss of strength and chronic pain; the disease was thought to be a major impediment to increased productivity in the rural South. While difficult to treat, Stiles found that hookworm was easily preventable with the use of sanitary latrines and wearing of shoes. The major challenge to combating the disease was the lack of awareness in the South of the disease's existence.

Strategy. Gates was immediately drawn to the challenge and excited about the possibility of devoting Rockefeller's resources to eradicating the disease.⁶² In October 1909, Gates, Rockefeller's son John D. Rockefeller Jr., and twenty others formed the Rockefeller Sanitary Commission, chaired by Gates, for the Eradication of Hookworm Disease in the South. Rockefeller granted \$1 million over five years to the new commission.⁶³

Between 1909 and 1913, the Sanitary Commission, under the administrative leadership of Dr. Wickliffe Rose, a professor of philosophy at Peabody College in Nashville, mounted an assault on hookworm disease in the South. Despite having to overcome the regional bitterness between the North and the South that was still pervasive in that period ("laziness," for instance, was emphasized in Northern newspapers as a symptom of the disease and as a broader characteristic of the South), Rose built relationships with eleven state departments of health to combat the hookworm problem and dramatically raised the level of public awareness regarding hookworm disease and methods for its prevention.⁶⁴

In May, 1913, near the end of the five-year Sanitary Commission grant, the trustees of the newly incorporated Rockefeller Foundation held their first meeting. Enthusiasm over the progress of the Sanitary Commission prompted the trustees to affirm a recommendation by Gates to pursue public health as the primary focus of the new foundation's grantmaking. In particular, the trustees, learning from Rose that the eradication of hookworm required action beyond U.S. borders to other countries where hookworm persisted, asked Rose to prepare a plan of operation for the Foundation to

undertake such action. A month later, the Foundation established the International Health Commission (later renamed the International Health Board and then the International Health Division), with Rose as director, to pursue the eradication of hookworm abroad and, more broadly, the promotion of public health and sanitation. At the same time, the Sanitary Commission was merged with the new Commission.⁶⁵ The International Health Commission operated as a division of the Rockefeller Foundation until 1951.⁶⁶

Rose developed a strategy for combating hookworm in the United States that became a template for controlling the same disease, as well as other diseases, throughout the world. First, a campaign under the auspices of the Sanitary Commission and later the International Health Commission undertook a comprehensive survey to understand the geographic reach of the disease as well as the rate of infection. The next step consisted of a broad publicity campaign to express to the public, and to medical practitioners in an area, the extent to which the disease was hindering the community's prosperity, as well as the relative ease with which treatment and preventive measures could control the disease. For hookworm control in the South, each state was assigned a director of sanitation as well as a staff of sanitation inspectors and microscopists to conduct free traveling clinics at which attendees could be treated and could receive literature on improving public sanitation. Central to Rose's strategy was that the International Health Commission would work behind the scenes, empowering local governments to authorize and direct all action.⁶⁷

Rose's early ambitions included the eradication of diseases, beginning with hookworm. His ambition for total eradication of disease made its way into the Rockefeller Foundation's early annual reports and was reported in the news.⁶⁸ Indeed, the Rockefeller Foundation celebrated successful elimination of various diseases in specific countries in which the International Health Commission worked, almost invariably attributing the success to the Rockefeller Foundation.⁶⁹ In Rose's work with the Sanitary Commission, however, he learned that prompt eradication of hookworm was impractical. Accordingly, the objective became control of the disease rather than eradication.⁷⁰

In developing and administrating a plan of attack against hookworm, Rose began to think of public health in terms broader than any particular disease. In his mind, the campaign against hookworm could be a demonstration project for disease control and public health.⁷¹ The International Health Board later applied this model to malaria, tuberculosis, and yellow fever.

Furthermore, controlling any specific disease was complementary to spreading Rose's broader philosophy that governments should take responsibility to equip themselves with adequate public health organizations that would undertake future campaigns to control diseases. Determining that the county was the optimal unit of organization for public health efforts in the United States, the International Health Commission began in 1916 making grants of seed money to start county offices of public health, a strategy Rose called "pump priming."⁷² International Health Commission campaigns against hookworm in Mexico and Ceylon similarly instilled in the public the expectation of public health offices and an increased interest in public health.⁷³

Impact. Some have made efforts to quantify the impact of Rockefeller philanthropic efforts toward disease eradication, such as in terms of the rise in school enrollment immediately following hookworm campaigns in the South, as well as the enhanced development of human capital in the South and, later, in developing tropical countries.⁷⁴ More generally, the \$94 million spent by the International Health Commission of the Rockefeller Foundation and the Rockefeller Sanitary Commission between 1909 and 1951, in grants for public health worldwide, created the concept of public health in this nation and around the world, and the Rockefeller Foundation's efforts have widely been credited with major public health advances in the first half of the twentieth century.⁷⁵

The Rockefeller Foundation's success in combating yellow fever has been particularly well documented. In 1938, a *New York Times* editorial noted that "[t]he more recent history of yellow fever is largely the history of the Rockefeller Foundation's support of research and preventative tropical medicine."⁷⁶ The following year, International Health Division research Max Theiler discovered a

vaccine for the disease, which the Foundation then mass produced for distribution during World War II. ⁷⁷ The discovery earned Theiler the 1951 Nobel Prize in Medicine and the nickname “conqueror of yellow fever” among his colleagues.⁷⁸

Notes

60. Raymond B. Fosdick, *The Story of the Rockefeller Foundation* (New York: Harper & Brothers, 1952), 6.
61. John Farley, *To Cast Out Disease: A History of the International Health Division of the Rockefeller Foundation, 1913–1951* (Oxford: Oxford University Press, 2004), 3.
62. Fosdick, *Rockefeller Foundation*, 10.
63. Farley, *To Cast Out Disease*, 3.
64. Fosdick, *Rockefeller Foundation*, 10.
65. *Ibid.*, 24.
66. Farley, *To Cast Out Disease*, 19–20.
67. Fosdick, *Rockefeller Foundation*, 32–34.
68. “Expect to Prevent Malaria Entirely,” *New York Times*, 6/25/1919, 10.
69. “Yellow Fever Banished,” *New York Times*, 12/15/1921, 5; “Says Medicine Must Take the Offensive,” *New York Times*, 8/7/1924, 17; “Rockefeller Fight on Disease Gaining,” *New York Times*, 9/7/1924, E5; “Succeeds in Fight on Yellow Fever,” *New York Times*, 6/3/1926, 14; “Yellow Fever Conquered,” *New York Times*, 6/17/1927, 23.
70. Fosdick, *Rockefeller Foundation*, 32–36.
71. *Ibid.*, 32–35.
72. *Ibid.*, 32–40.
73. Farley, *To Cast Out Disease*, 84.
74. Hoyt Bleakley, “Disease and Development: Evidence from Hookworm Eradication in the American South,” *Job Market Paper*, 10/4/2002, 4–5.
75. Fosdick, *Rockefeller Foundation*, 32–57.
76. “Yellow Fever—An Opportunity,” *New York Times*, 3/24/1938, 22.
77. “Nobel Prize Won by New Yorker for Work on Yellow Fever Virus,” *New York Times*, 10/19/1951, 1.
78. *Ibid.*