

Battling Soil-Transmitted Intestinal Worm Disease: From the Hookworm Campaigns of the Rockefeller Foundation to Contemporary Mass Drug Administration

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Summary

In the early twentieth century, the Rockefeller Sanitary Commission and the Rockefeller Foundation's International Health Board (later, International Health Division) undertook campaigns in a number of world regions to treat hookworm disease and to promote 'sanitation,' that is, improved excreta disposal. The campaigners learned that chemical therapy would not clear all hookworm infections, and they were unable to mobilize the support of governments for the reform of open defecation practices. Some campaigns achieved successes in reducing disease, but they were discontinued in the 1920s on the understanding that sanitation programs were foundational for success in eliminating hookworm disease. In the first decade of the twenty-first century, under the rubric of "Neglected Tropical Diseases," global health organizations re-engaged the struggle against all three soil-transmitted helminth (STHs) infections – hookworm, roundworm, and whipworm. The new campaigners rolled out mass drug administration (MDA) programs to reduce the incidence of disease without programs to improve excreta disposal. This approach effectively ignored the lessons of the early twentieth century campaigns. Intestinal worm transmission continued, and the efficacy of the MDA programs was threatened by the emergence of helminthic drug resistance.

Keywords: hookworm, roundworm, whipworm, soil-transmitted helminths, Rockefeller Sanitary Commission, Neglected Tropical Diseases, sanitation

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