

Rockefeller Philanthropies and Malaria Control in Early 20th Century Palestine

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Abstract

This report summarizes two weeks of research at the Rockefeller Archive Center (RAC), conducted in April 2019. I focused my research on the involvement of Rockefeller philanthropies such as the International Health Board and Rockefeller Foundation in antimalarial operations in British-ruled Palestine during the beginning of the 20th century. The research I conducted at the RAC helped me determine that the most important scientific unit working to combat malaria in Palestine as well as to facilitate Jewish settlement in the country was, in essence, a quasi-Rockefeller agency. Additionally, the research I conducted suggests that the events in Palestine should be placed in a broader, global context of the interventions of Rockefeller's International Health Board around the world.

Health and Malaria Control in Early 20th Century Palestine – Where is the Rockefeller Foundation?

I am a comparative-historical sociologist interested in the relationship between public health campaigns and state-formation. Specifically, I focus on the relationship between public health campaigns undertaken by American Jewish bodies in Palestine (e.g., Hadassah Women’s Zionist Organization and the Joint Distribution Committee). The two weeks I spent at the Rockefeller Archive Center helped me collect important materials that enabled me to write parts of my article titled “Kill Me and Mosquito and I Will Build a State: Political Economy and the Socio-technicalities of Jewish Colonization in Palestine, 1922–1940,” published in *Theory and Society*. My research at the archives was also highly important for my dissertation project, tentatively titled “Building a Strong Settler State: The Case of Israel.”

Specifically, my research at the Rockefeller Archive Center was related to Jewish malaria control and eradication activities undertaken by the Malaria Research Unit, formed in 1922, which was funded by the American Jewish relief organization, the Joint Distribution Committee. The Unit disbanded in 1931. The Malaria Research Unit was a part of the department of health of the British government which ruled the country from 1920 to 1948. The Unit is important because it worked to facilitate Jewish settlement in Palestine as part of the Jewish national project to which malaria posed serious challenges. Malaria was perhaps the most prevalent disease in Palestine during the late 19th and early 20th centuries. Its effects on Jewish colonization attempts were devastating. Malaria killed and incapacitated settlers and threatened the viability of Jewish colonization in the country and the prospects of bringing in future immigrants.¹ The Malaria Research Unit is important; as not only did it provide a lifeline for existing Jewish settlements at the beginning of British rule, but also because it laid the scientific foundations for malaria control and eradication in Palestine and later in Israel (see Yekutieli, quoted in Sufian 2007: 217).

There is much research on the importance of medicine, health, and public health campaigns for the Zionist project, by both historians and sociologists (e.g. Hirsch 2008, 2014; Shvarts 1998; Shvarts and Shehory Rubin 2012; Davidovitch and Greenberg 2007; Davidovitch and Zalashik 2010; Sufian 2007), but only scant evidence of any involvement by Rockefeller entities. Historians found that the Rockefeller Foundation funded the Malaria Survey Section that conducted surveys in the country for a few years during the 1920s and then disbanded. Like the Malaria Research Unit, the Malaria Survey Section was also a part of the British colonial state's department of health (Sufian 2007). Archival materials also show that on top of this contribution, the Malaria Survey Section was replaced by a British official who studied sanitary engineering in the US and whose education was funded by the International Health Board.²

Given the prevalence of malaria in Palestine and the British colonial state's penchant for economizing its expenses, it is surprising that historical research found evidence of only little involvement of the Rockefeller Foundation and International Health Board in public health initiatives in the country. Starting from the early 20th century, Rockefeller's International Health Board (and later the International Health Division) began initiating hookworm and malaria eradication campaigns abroad, following similar Rockefeller philanthropic eradication efforts in the southern United States. The International Health Board offered help to local governments in dealing with these scourges by providing education, some financial resources, and expert advice.³

My own research, conducted at the Rockefeller Archive Center and other locations, uncovers a hidden and much more complex relationship between the Rockefeller Foundation and the antimalarial operations in Palestine. This involvement was tied to the dynamics of Jewish state-building and colonization in the country. Specifically, my research at the Rockefeller Archive Center allowed me to follow clues of Rockefeller involvement in Palestine that were hinted at or only briefly referred to in documents collected elsewhere and in historical research. However, in those previously collected materials and secondary sources, I did not find an adequate explanation of how exactly Rockefeller entities were involved in the operations in Palestine.⁴

The documents at the Rockefeller Archive Center show that much of this involvement begins, and to some extent revolves, around the work of one man – Israel Jacob Kligler.

Kligler conducted successful malaria control experiments that led to the formation of the Malaria Research Unit, which he then headed until 1926 when he left to head the department of hygiene in the newly formed Hebrew University in Jerusalem (Sufian 2007).⁵ He came to Palestine after working for the Rockefeller Institute for Medical Research from 1916 to 1920, where he studied rural sanitation and soil pollution, amongst other things. He also worked closely with the renowned bacteriologist Hideyo Noguchi and served on the Rockefeller Foundation's Yellow Fever Commission sent to Mexico and Peru. After this service, he left for Palestine as part of the American Zionist Medical Unit that was sent to Palestine by the Joint Distribution Committee and Hadassah Women's Zionist Organization to assist Jews in the country recover from the ravages of World War I (Greenberg and Alexander 2012; Shvarts 1998).

In Palestine, Kligler did more than conduct research that helped facilitate Jewish settlement and organizing antimalarial operations. He was an academic engaged in scientific research and actively advanced his career. His work and publications hint at his background at Rockefeller institutions. For example, he refers to the malaria control work conducted by Colonel William Gorgas in Panama as well as to studies by Charles C. Bass regarding the use of quinine to treat malaria patients. Both men worked for the Rockefeller Foundation during Kligler's tenure at the Rockefeller Institute.⁶

In general, as I have discussed in my article, the Malaria Research Unit was indeed a quasi-Rockefeller unit in the sense that it constituted an extension of sorts of the International Health Board. The scientific knowledge the Malaria Research Unit used, and the Unit's principles for organizing antimalarial operations were borrowed from the International Health Board.⁷ It is important to note that the documents do not simply present the links between the Malaria Research Unit and the Rockefeller Foundation and International Health Board. However, for one familiar with the activities of Malaria Research Unit, the documents offer a glimpse to the work of Rockefeller entities, mostly the Rockefeller Foundation, the Rockefeller Institute for Medical Research, and the International Health Board (and its precursors and predecessors). These data, in turn, allow for a comparison of the work of the Unit to the work of those bodies and their researchers. Coupled with the life stories of some of actors involved (i.e., Kligler), one can establish the connections.

Aside from the relationship between Rockefeller entities, malaria control and Jewish state-formation, the documents that I discovered help situate antimalarial operations in Palestine in a broader global perspective of Rockefeller Foundation and International Health Board operations around the world. First, the documents uncover how informed prominent figures in the International Health Board and the Rockefeller Foundation were of the operations in Palestine. Members of the Malaria Survey Section sent reports and updates to Victor Heiser, while Frederick Russell visited Palestine and reported on his impressions.⁸ Second, the documents at the Rockefeller Archive Center expose the transnational dynamics and movements of scientific knowledge and expertise in the colonial world. For example, historian Warwick Anderson discusses Rockefeller Foundation and International Health Board antimalarial operations in his book about colonial public health in the Philippines. One of the figures who conducted these operations was J. J. Mieldazis, a member of the Malaria Survey Section.⁹

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¹ Malaria is caused by a plasmodium parasite that is carried by the anopheles mosquito. It is injected into a person’s blood once the mosquito bites and causes fever, shivering, damage to the spleen, and in some cases causes death. Since anopheles mosquitos breed in bodies of water – swamps, cisterns, streams, etc. – two of the most effective measures of malaria control are treating these bodies of water against mosquito breeding (with chemicals like Paris Green or D.D.T., for example) or draining them.

During the late 19th and early 20th century, Palestine was ruled by the Ottoman Empire (16th century until 1917) and, after World War I and Ottoman collapse, by the British Empire (1917-1948). While the Ottomans did not centralize antimalarial operations or leave a centralized body of statistics, evidence show malaria morbidity was extremely high.

Historians have described the “malariomania” that engulfed the doctors and residents of Palestine who used to treat every case of fever-inducing illness with the antimalarial drug quinine, since fever is a symptom of malaria (Sufian 2007: 81). Some doctors in Palestine recalled a case in which a physician from Palestine mistakenly diagnosed a sick girl with malaria and prescribed her with quinine. He maintained his diagnosis even though her blood tests were negative for malaria and the quinine did not help. A second doctor who arrived from Istanbul checked the girl and suggested that all symptoms point to typhus. When asked why he adhered to his initial diagnosis despite the test results and ineffective treatment, the doctor from Palestine answered, “But in a case, it was malaria!” (cited in Sufian 2007: 81).

Palestine's inhabitants also participated in the malaria frenzy. The disease was so common, that some did not report it, unless the attack they experienced was especially severe. Quinine was "a household remedy." A resident of the coastal city Haifa named S. Friedman even produced quinine wine that was officially licensed in 1895 (Sufian 2007: 81-82).

When the British army entered the country during World War I, it arrived from Egypt and moved north, while combating the Ottomans. The British reported that once they entered Palestine "it was evident that a highly malarious country had been occupied and the conditions were completely changed."¹ The war only made matters worse (Kligler 1930). During the early years of British rule, malaria remained endemic throughout the country (Kligler 1930).¹ As part of their rule of country, the British formed a functioning colonial state and administration in Palestine. That state's department of health began to centralize antimalarial operations, but, just like other British public health initiatives in the country, these operations were many times insufficient (Sufian 2007).

For Jewish-Zionist settlers, malaria was a severe obstacle. The disease ravaged all segments of the population – Palestinian Arabs and Jews – but had a special political significance to Jewish-Zionist settlers since it threatened the viability of the national project and the prospects of bringing future Jewish immigrants to settle in Palestine (Kligler 1930; Sufian 2007).

Since they were European and did not know malaria from their home countries, many Jews settled the coastal plains and northern valleys, areas where land for settlement was more easily purchased. But these areas also had many untreated and unregulated streams and swamps which spelled malaria (Kligler 1930). Unlike the Jewish settler-immigrants, the Arab inhabitants of Palestine knew malaria well and concentrated in either coastal cities or in the hilly area that is today's West Bank. Living on the hills provided some relief from the disease because of the relative distance from the coastal swamps (Sufian 2007: 100). As a result of their settlement choices, many Jewish settlers fell ill, and others died of either malaria or blackwater fever – a dangerous complication of malaria. Malaria was so common among Zionists that some saw it a "certificate of citizenship" of sorts: one was initiated into residency in Palestine only after going through their own feverish hazing (Sufian 2007: 79). The situation only changed after the beginning of British rule and the work of the Malaria Research Unit. See the introduction to Kligler's (1930) book.

² *Department of Health, Annual Report for the Year 1928*. Joint Distribution Committee Archives, Records of the New York Office, 1921-1932, Folder 291.

³ See Rockefeller Foundation annual reports, e.g. *The Rockefeller Foundation Annual Report 1917*, p. 40; "International Health Division," *The Rockefeller Foundation: A Digital History*, available at <https://rockfound.rockarch.org/international-health-division#ftnref2>. See also International Health Division Annual Reports, e.g. *The Rockefeller Foundation, International Health Board, Fourth Annual Report*, January 1st, 1917 – December 31st, 1917; *The Rockefeller Foundation, International Health Board, Third Annual Report*, January 1st, 1916 – December 31st, 1916.

⁴ For example, Malariologist Israel Kligler who headed the Malaria Research Unit, wrote an important report regarding the sanitary situation of Palestine while he was still at the Rockefeller Institute. The report was cited by historians (Sufian 2007) and can be found in the Central Zionist Archives in Jerusalem, record group J, series 15, file number 7212 as well as at the Rockefeller Archive Center, Rockefeller Foundation Archives, record group 3, series 908, box 12, folder 128.

⁵ The history of these experiments and the formation of the Malaria Research Unit can be

found in multiple sources such as Sandra Sufian's book *Healing the Land and the Nation: Malaria and the Zionist Project in Palestine, 1920-1947*, as well as in the writings of contemporaries like Kligler (1930) himself. The Unit was formed after American Supreme Court Justice and Zionist leader Louis Brandeis visited Palestine in 1919. He saw the devastation caused by war as well as the raging malaria. He then decided that for Jewish immigration and settlement in Palestine to succeed, malaria must first be controlled, and Palestine made habitable (Gal 1982). To begin a study of the problem he donated a substantial sum out of his personal funds which paid for Kligler's preliminary experiments. The experiments' favorable results led to the formation of the Malaria Research Unit.

⁶ On Gorgas see entry on yellow fever at "The Rockefeller Foundation: A Digital History." <https://rockfound.rockarch.org/yellow-fever>

On Bass' experiments, see "The Rockefeller Foundation, Annual Report, 1917," pp. 184-194. See also a scanned letter by Bass to the residents of "community no. 6" of Bolivar County, Mississippi. For Kligler's references to their work see his report on sanitation in Palestine mentioned in endnote ii as well as his book *The Epidemiology and Control of Malaria in Palestine* (Kligler 1930), especially p. 134 where Kligler refers to Bass' experiments in Mississippi as well as to Gorgas' work.

Other documents also hint at how Kligler followed Rockefeller-based procedures and practices in his work at Palestine. For example, documents detailing the work of the American Zionist Medical Unit show that he organized malaria control experiments based on International Health Board methods. See *Hadassah Medical Organization, Third Report, September 1920 – December 1921*. Central Zionist Archives, SOK/91527.

⁷ Some argued that Rockefeller Foundation malariologists mainly adhered to mosquito control as their preferred method while Italian malariologists preferred the distribution of the anti-malaria drug quinine (Stepan 2011). The Malaria Research Unit also adhered to mosquito control, with Kligler citing Gorgas' work as an example. However, the documents I have found complicate this distinction between Rockefeller Foundation and Italian malariologists and show that quinine was indeed used at least inside the United States. However, I have not conducted sufficient research to determine whether that claim was correct or not and opt to accept it as generally accurate.

⁸ See Rockefeller Foundation Archives, record group 5, series 2, box 61, folder 398.

⁹ See Anderson (2006: 198, 218). Compare with Rockefeller Foundation Archives, record group 5, series 2, box 61, folder 399.