

Stephen E. Mawdsley. *Selling Science: Polio and the Promise of Gamma Globulin.* Critical Issues in Health and Medicine Series. New Brunswick: Rutgers University Press, 2016. 232 pp. \$54.95, cloth, ISBN 978-0-8135-7439-4.

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As with many people born at the end of the 1950s and the beginning of the 1960s, my first polio-associated recollection is very sweet: it consists of a sugar lump that was offered to me by a kindly nurse. This sugar contained nothing less than the vaccine against a disease that generated a feeling of justified terror in society, which I was unaware of at the time. Naturally, the set of images that come to mind now when thinking of polio is much less sweet. Very soon, the complete picture of “infantile paralysis” started to take shape with friends and school companions whose legs showed a characteristic anatomy and who periodically, after a time of absence, returned to our common setting skillfully handling crutches or with complicated orthopedic apparatus attached to their legs, aimed at improving their ability to walk. Through the press, film, and television, such spaces as operating theaters and physiotherapy rooms or such impressive gadgets as artificial lungs were added to this iconography of polio, used to complete an album of representations bearing an intense, complex emotional component. In this volume, pain, disability, and social stigma are inevitably included, but hope, courage, pride, and even joy also appear.

Many of these images and feelings form significant elements in the valuable contribution

that Stephen E. Mawdsley has made to the understanding of the exchange processes between disease, medicine, disability, and society. *Selling Science* is an appreciable contribution to the history of polio, which has received well-deserved attention as it deals with a disease that has provoked controversy in our recent past. Although a pathology that was known to doctors at the end of the nineteenth century, infantile paralysis emerged as a threat to Europeans and Americans due to its manifestation as an epidemic. This public reaction, which occurred repeatedly during the twentieth century, set forth the need to link up appreciable efforts—political, economic, social, scientific, and health care—aimed at trying to prevent or reduce its terrible consequences. It is not surprising that the analysis of all this has aroused the interest of historians. It is enough to consult the bibliography that Mawdsley incorporates in his book, even when only studies produced in the Anglo-Saxon area are included, to verify the collective effort made to explore not only the demographic, social, and cultural impact of polio but also to discover the way in which people reacted to it and to reconstruct the life experience of those who suffered from it. This historiographic work has allowed different perspectives (social, cultural, political, economic) to be applied to the study of dis-

ability and comparison of the the value of certain analytical categories, as is the case of disability, for researching our past.

The book is part of a series—Critical Issues in Health and Medicine, published by Rutgers University Press and edited by Rima D. Apple and Janet Golden—aimed at facilitating reflections about the American health-care system from a wide range of perspectives, including political, legal, historical, and sociological. The inclusion of Mawdsley’s work in this series is well justified insofar as it offers insightful information about the way in which American society articulated attempts to provide the means for preventing polio, or at least, to treat it efficiently, aimed at reducing its formidable consequences, such as death, disability, suffering, and economic loss. Specifically, Mawdsley explores how healthy members of the American population were persuaded, in the 1950s, to participate as medical experimental subjects. He argues that the mass clinical trial that showed the safety and efficiency of the vaccine developed by Jonas Salk (1914-95) to prevent polio, carried out in 1954, was encouraged by a previous one. This earlier study tested the value of administering gamma globulin to healthy people to prevent polio or decrease its effects. The efficiency of this blood fraction in preventing other diseases brought the hope that it could be similarly suitable for preventing the pathological action of poliomyelitis. Initiated by an epidemiologist from the University of Pittsburgh, William McDowell Hammon (1904-89), and supported by the National Foundation for Infantile Paralysis (NFIP), the idea of carrying out a large-scale experiment started to take shape. *Selling Science* offers a narration of this process of using healthy people in these experiments, but the discussion is not solely descriptive. Handling interesting documentary sources efficiently—oral history interviews, newspapers, medical journals, meeting minutes, and private institutional records—Mawdsley has put together a book that has the ability to captivate readers and accomplishes his proposed objec-

tives. He “delv[es] deeper into the nature of medical experimentation conducted on an open population in [the] mid-twentieth century,” clarifying what had happened previously for a clinical trial to be carried out with thousands of healthy children to contrast the safety and efficiency of the Salk vaccine, and to establish the role played by advertising in shaping public perceptions about medical research (p. 1). As I will attempt to show below, Mawdsley also manages to show us other highly interesting elements.

Selling Science is divided into six chapters that are preceded by an introduction aimed at positioning readers at the starting point of what would end up being the “first large clinical trial to control polio using healthy children drawn from an open population” (p. 12). Through the six chapters, Mawdsley skillfully traces the different obstacles (scientific, financial, political, social, and cultural) that those who considered it necessary to carry out this clinical trial confronted and shows how these obstacles were overcome. The author makes an astute presentation at the beginning of each chapter with the main questions that he sets out to clarify. He proposes an intellectual journey that takes us from scientists’ belief that gamma globulin could be effective against the disease and presentation of the factors that complicated the verification of this idea in human beings, to the actual national experiment and its effects on the future plans to fight polio. Along the way, Mawdsley takes us on a journey to places that represent the construction of the consent to carry out the trial; he examines marketing, necessary to mobilize and gain support from American society, and the undertaking of a pilot study. But while we move from start to finish on this route, the author makes, in an agile conversation with readers, intriguing assessments about the tactics used by the scientists and those in charge of the program to convince society about the suitability of allowing and supporting the initiative, even when the results of the trials showed that gamma

globulin did not have the expected effectiveness in containing polio.

The author does not restrict himself to offering documentary references to support his affirmations, but rather talks to the protagonists to show the testimonies on which he builds his narration. Handling verbatim interview quotes in a balanced way, Mawdsley gives greater strength to his work. For example, it would have had less of an impact for readers to simply know that Mamie Eisenhower (1896-1979) tried to convince Americans to obtain funding for research on infantile paralysis than to know that she did this by addressing American mothers, upholding the fact that their cooperation had to be used to develop “a new weapon” to “prevent the crippling and deformity” of polio (p. 128). Therefore, the way in which citizens’ feelings and moods surrounding infantile paralysis and its consequences were handled to achieve the objectives set forth by scientists, politicians, and institutions is shown in a way that makes a forceful impact on the reader. On this point, Mawdsley’s analysis of how Hammon and his team gained support in Utah County for the pilot study is particularly interesting. Here, as a kind of epitome of the book, the author offers an interesting image of the complexity of the social bargaining process of turning a scientific idea into a public health practice. Mawdsley demonstrates how the different agents—Hammon, the NFIP, local doctors and nurses, families, journalists—positioned themselves against the threat of polio, defending their strategies and interests and overcoming the reactions and resistance that arose in the face of some approaches.

Selling Science shows that the study of disability can offer significant contributions when spaces are explored, but where its presence might not be as tangible as when confined in a rehabilitation facility or linked to an association of people with physical impairments. The book shows that disability represents a powerful conditioning factor in the behavior of all those who form part of a

human group. As Mawdsley argues, the fear and anxiety caused by the possibility of disability appearing in our homes makes disability a useful means to persuade the population to adopt steps to fight it, and to obtain the complicity of citizens to awaken a response in spite of its questionable ethical legitimacy. *Selling Science*, therefore, should interest not only medical and scientific historians, who will find relevant analysis of how the experiment was carried out, but also those who are concerned about discovering how disability affects our lives, determining who we are and how we are.

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