M.I. Porras Gallo, MJ Báguena Cervellera, M. Ayarzagüena Sanz, N.M. Martín Espinosa (eds.), La erradicación y el control de las enfermedades infecciosas. (Madrid, Catarata, 2016)

Josep L. Barona (Universitat de València, Spain)

The eradication of smallpox proclaimed in 1980 by the World Health Organization (WHO) has often been presented as a major milestone in the fight against infectious diseases. This apparent success was submitted to academic debate in July 2015, when a symposium on the challenge represented by the eradication and control of infectious diseases took place at the Universidad de Castilla-La Mancha (Ciudad Real, Spain). The meeting was organised by the local history of medicine research group 'Salud, Historia y Sociedad'. Its main goal was to establish a space of debate among medical, global and social historians, public health experts, and anthropologists, around the concept of eradication and the two main WHO eradication programmes on smallpox and poliomyelitis. This book collects most of the contributions to the symposium, adding a few complementary chapters. Its background is extensive research undertaken by the promoters since 2006 about poliomyelitis policies and smallpox vaccination campaigns in Spain in an international context.

The book is composed of 12 chapters contributed by 19 authors, mostly Spanish academics, but also a few researchers from Canada, Portugal and the Netherlands. It opens with a presentation and a historiographical introduction, and ends with a chapter containing the set of bibliographical references.

The introductory chapter by María Isabel Porras and Rosa Ballester discusses the concept of eradication, the ideology involved, subsequent strategies and costs for national and international public health. The discussion around attitudes regarding the smallpox eradication program is also the guiding thread of Anne-Emanuele Birn's contribution. She discusses the opposed arguments in favour and against the eradication programs implemented by WHO, highlighting the critical opinions repeatedly expressed by Halfdan Mahler, former director general of the international agency. He contradicted the praised arguments of Donald Henderson, head of the smallpox eradication program, who

considered smallpox eradication as a milestone in the history of the fight against infectious diseases. Undoubtedly, the critical argument about cost-benefit is a strong one since eradication involves such a huge amount of funding in laboratory research and vaccine production, so this necessarily affects the abandonment and neglect of other fruitful preventive policies. Even the international policies of giving free vaccines to developing countries could have negative collateral effects, if the money saved by poor countries in vaccines is not reinvested into other urgent public health policies. In addition, Birn argues that the eradication strategy negatively affected the full implementation of the Alma Ata declaration approved by the WHO concurrent with the eradication program.

The book is mainly focused on smallpox and poliomyelitis. Willibrord Rutten uses demographical and epidemiological evidence to show the crucial influence of smallpox epidemics in the evolution of the population in the Netherlands during the eighteenth and nineteenth centuries. He concludes that smallpox vaccination increased life expectancy for children, at least in the most populated areas of the Netherlands. María José Báguena and Lourdes Mariño explain the benefits obtained by the implementation of smallpox vaccination campaigns in Spain between 1959 and 1982. The initiative started with the creation of a Spain-25 Programme implemented by a public laboratory used as a pilot centre for the production of vaccine in accordance with the quality requirements of WHO. This vaccination programme aimed the eradication of the disease in 25 years.

From a more general perspective, Rosa Ballester, Noelia Martin and María Isabel Porras offer a discussion not only of the importance of vaccination campaigns for the control of certain infections; they also emphasize the role of the WHO in the search for equity and universality. They use poliomyelitis as a case study demonstrating the establishment of a global strategic reserve of antipolio oral vaccine by the WHO in 1964. Five more chapters focus on poliomyelitis from different perspectives. María Isabel Porras and María Victoria Caballero discuss the scientific and political background of the failure of Pierre Lépine in producing a new vaccine at the Institute Pasteur as an alternative vaccine to that established by Salk and Sabin in the context of the epidemic outbreak after World War II. Vaccination strategies against poliomyelitis in Portugal, Spain, France,

Belgium and the United Kingdom are discussed in other chapters considering the specific economic, political and social factors which led to substantially different results in these countries.

The book also includes a chapter by Manuel Ortiz Heras and Damián González Madrid discussing the evolution of social policies in Spain during the authoritarian Francoist regime and the first period of transition to democracy. They pay special attention to public health, stressing the inefficient model in Franco's times and the limitations in the construction of welfare policies.

Several books on the eradication of smallpox and vaccination policies have been published recently. Among the most relevant are Bob H. Reinhardt's *The End of a Global Pox: America and the Eradication of Smallpox in the Cold War Era* (2015) and also *The Politics of Vaccination. A Global History*, edited by Christine Holmberg, Stuart Blume and Paul Greenough (2017). The abundance of recent relevant research on the eradication of infections reflects the interest of this topic to current historiography. This book is a timely and important contribution to the issue.