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CHOLERA

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Preface

It would be no exaggeration to say that it was through cholera, and the fear to which its pandemic sweeps gave rise, that international solidarity in matters of health was born. Cholera was the principal disease covered by the early international sanitary conventions and came at the head of the list of quarantinable diseases. Koch's discovery of the cholera vibrio, and thus the confirmation of the contagion theory, in 1884 was a scientific keystone of the greatest importance and lay at the base of much progress in the drafting of future sanitary conventions. While in Europe cholera has not been seen since the early twentieth century, its endemic foci in Asia remain, occasionally erupting into epidemics. The disease continues to claim an annual toll of tens of thousands on that continent and to menace other parts of the world, as witnessed by the 1947 epidemic in Egypt whence the disease had disappeared since 1919.

Much has been written on cholera in the past hundred years, but a great part of the work is scattered among the periodicals of the world and is often not easily accessible. Some of this work has proved to be of transitory importance; some, on the other hand, now fallen into neglect, merits inclusion in the history of medical discovery. To-day research workers are still at grips with a number of problems, among them the immunological characteristics of the vibrio and their implications for cholera vaccine; differential bacteriological and biochemical diagnosis and phage typing; and a variety of practical questions of prevention and treatment depending on these.

To assist public health services responsible for cholera control in endemic areas and to provide guidance for those who may one day be faced with the problem in countries now free from the disease, the World Health Organization invited Dr R. Pollitzer to prepare a monograph on cholera. The eleven chapters which constitute the main part of this book originally appeared as separate articles in the *Bulletin of the World Health Organization*

over a period of three years; they have now been revised and brought up to date in the light of comments received and new information made available during that period.

Dr Pollitzer writes with an authority derived from a long career devoted largely to the fight against cholera and plague. His monograph on the latter disease, published by WHO in 1954, is already recognized as a classic; the World Health Organization publishes the present work in the confident hope that it will receive the same acclaim.

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During the three years which he devoted to the compilation of the present book, the author has had the benefit of much assistance, advice and encouragement from many institutions and persons. Impossible as it is to enumerate all of them, he wishes nevertheless to record his particularly great indebtedness to the following: The Regents of the University of California most generously accorded to the writer the status of a research associate attached to the George Williams Hooper Foundation, Medical Center, San Francisco. The director of this institution, Dr K. F. Meyer, and also Dr B. Eddie, not merely granted him adequate facilities for writing the text, but were indefatigable in helping the author in every possible way and constantly encouraging him. Most kindly given help in administrative matters was received from Professor H. G. Johnstone, Dean of Students in the Medical Center. Even so it would have been impossible to complete the work had not the author been given most generous grants-in-aid first from the Division of Research Grants and Fellowships of the National Institutes of Health, US Department of Health, Education, and Welfare; then by the Foundation for Microbiology, Rutgers University, New Brunswick, N.J., USA, and finally by the World Health Organization.

The writer's great responsibility in compiling this monograph has been much alleviated by the willingness of two colleagues outstanding in cholera research to participate in his labours: Dr Satya Swaroop, who combines a most authoritative knowledge of medical statistics with a thorough acquaintance with the cholera problem in India, kindly consented to be mainly responsible for the part of the work dealing with the present incidence of the disease; similarly, Dr William Burrows put the author under a deep obligation by participating in the most difficult task of discussing the problems of cholera immunology, to the elucidation of which his own researches have so much contributed. The author is also much indebted to Dr Jean Gallut of the Institut Pasteur, Paris, who has undertaken for the World Health Organization the translation into French of this book, for constantly furnishing information on his own important cholera research work.

It might seem at first glance that San Francisco, now far in time as well as in space from any cholera manifestation, would hardly be a proper locale for making a study of the problems of this disease. Actually, however, the rich main library of the Medical Center in combination with the literary treasures possessed by the Hooper Foundation furnished the author with most of the information which he needed, while certain series of publications, which could not be found on the campus, were fortunately within easy reach in the Lane Library of Stanford University, San Francisco. The author has to thank the staffs of these libraries not only for permission to consult their files, but also for going far out of their way to make these studies particularly easy and enjoyable. On the comparatively rare occasions on which help was required from libraries outside San Francisco, the needs of the author were most obligingly responded to by the Library of the World Health Organization in Geneva or, in a few instances, by the National Library of Medicine (formerly Surgeon General's Library) in Washington, D.C.

