Secret agents: the menace of emerging infections

By Madeline Drexler
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As one would expect from the title, Madeline Drexler takes us down into the underworld where the ruthless struggle between man and microbial agents has been going on since the earliest existence of our species. In doing so, she gives us both a medical detective story about the real health dangers of today and a history of the battles human beings have fought over the centuries against successive waves of microbial invasion.

Drexler takes us behind the scenes of public health investigations that have been in the headlines in recent years. She describes how professionals detect emerging threats to health, investigate epidemics, and carry out prevention and control activities against often highly ingenious microbial manoeuvres. In doing so, she portrays some of the women and men who are dedicated to surveillance and the protection of people’s health. They are less well known to the public than their medical counterparts who repair damaged organs and treat illnesses, but they are equally in the front lines in the war to defend our health.

Through a quick succession of exciting chapters, Drexler educates the reader about the fascinating invasion strategies microbial agents use, and the mechanisms that enable them to slip through man’s defences and wreak havoc with infection. She describes how groups and individuals are constantly at work to rebuild their defences and restore to their own advantage the unstable balance of power between them and their invisible cohabitants.

We also learn about how our changing behaviour and our social and economic arrangements affect the emergence and propagation of infections. This is particularly striking in the case of the new foodborne diseases related to the industrial-scale production and global distribution of what we eat. It is seen equally in the health hazards that come to us with the exponential growth of travel and transportation which have reduced the time and space of our planet to those of a small village. A virus once considered exotic can be disseminated around the world within a few days and trigger an epidemic thousands of miles from its natural habitat. Of course, all this changes the options for bioterrorism and these are also described in a well-documented and objective manner.

Beyond the traditional part played by microbial agents in the onset and outbreak of disease, the author takes us to the new frontiers of scientific knowledge about the pathogenic impact of these secret agents. In particular she reviews the rapidly growing and promising area of knowledge about the relationships between latent infections and the development of chronic diseases such as gastric ulcers, cancers, vascular atherosclerosis, and neurological disorders.

With considerable talent, Drexler makes all of these often complex concepts and pieces of scientific knowledge easily accessible to the general reader. She displays the know-how of the scientific journalist who combines rigour of argumentation with a superb gift for finding the right striking expression.

The information sources which support the chapters are from among the best American specialists in these fields. She gives her personal opinion on sensitive and controversial subjects, but always provides the elements the reader needs to make up his or her own mind about them. She does not try to hide the shortcomings of those responsible for public health policies or the weaknesses of our societies, but makes a convincing plea for strengthening public health activities.

Beyond providing the pleasure of reading about these adventures in the fascinating world of microbial secret agents, this book stimulates us to consider the fragility of mankind and of our planet. It increases our awareness of what is at stake for our politics, for our health and for our humanity as we respond to the permanent threat of emerging infections. Written by an extremely talented writer, Secret agents should be consumed without moderation by all those with an interest in health, or just in life itself.

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