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The Eleventh Plague: The Politics of Biological and Chemical Warfare

by Leonard A. Cole W.H. Freeman and Company ISBN: 0-7167-2950-4, 1996, \$22.95

REVIEWED BY BARBARA J. CULLITON Editor-in-Chief, Nature Medicine

For anyone who is not cognizant of the scientific or political outlines of the debate about biological and chemical warfare in the latter half of the twentieth century, *The Eleventh Plague* is an informed and lively introduction, if a book about so dreadful a subject can be called lively.

The title is an extension of the ten plagues described in the biblical story of Exodus, says author Leonard Cole of Rutgers University. "None of the plagues was biological and chemical warfare. Did God not know about the eleventh plague?" he asks, or is it possible that "poisoned weapons seemed too vile that God wished people might never find out about them." Cole sets his tone early in his book when he recounts the use of chlorine gas by the Germans against French soldiers near Ypres in Belgium on 22 April 1915. "The gas hung close to the ground and within minutes thousands of soldiers were enveloped. Gasping for breath they began to froth at the mouth. . . writhing in agony unspeakable, their faces plum colored, while they coughed blood from their tortured lungs."

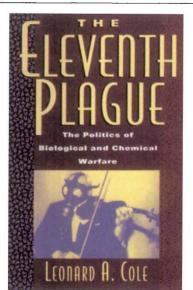
Similar passages throughout Cole's treatise reinforce the central theme of his book — namely that biological and chemical warfare are so beyond the pale of man's inhumanity to man that moral outrage should be sufficient motive to ban them worldwide. No one in her right mind would argue the immorality of using chlorine gas, or sulfur mustard, or Lewisite to burn the lungs of soldiers or civilians in war. No one can argue the immorality of poisoning the world by unleashing anthrax spores or Ebola virus on the population.

The trouble with Cole's book is that he devotes so much space to arguing the obvious on moral grounds, while spending relatively less effort aimed at a solution in the real world. The lucid accounts

Cole gives of the debate about the use of biological or chemical weapons during the Gulf War are all it takes to bring home the fact that morality and reality do not always have much to do with one another. Whether Iran or Iraq did or did not use such weapons, the fact is they could, as could virtually any nation. Unfortunately, such weapons are easy and inexpensive to construct and, unlike nuclear components

such as plutonium, are made from ingredients that are readily accessible for peaceful uses — for agriculture, for instance.

Cole gives short shrift to the difficult but legitimate issues of conducting defensive research beyond noting that protective space-suit-like clothing is neither



sufficient nor practical. If there is reason to fear an enemy attack by virus, there is reason to do research to protect troops and civilians from infection.

Cole's conclusion that "Banning biological and chemical weapons is easier to accomplish than banning other weapons because biological and chemical weapons provoke an unusual sense of repugnance," is not obvious on its face and certainly begs the question of nuclear attack or even the horror of

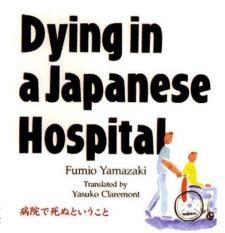
warfare by fire, as in the fire-bombing of Dresden. Leonard Cole is entirely correct to feel passionately against the use, or even possession, of the agents of biological or chemical war. But his call against arms on moral grounds alone is not compelling enough to affect political reality.

Dying in a Japanese Hospital

by Fumio Yamazaki
The Japan Times, ISBN: 4-7890-0845-2

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Most terminal cancer patients in Japan have to fight for their lives without knowing the truth; they are not informed as to what disease they suffer from, the stage of their illness or whether they will get better or have no chance to survive. For example, patients with stomach cancer are told instead that they have an ulcer or gastritis, because family members and physicians are afraid that the patients, many of whom have a serious fear of death, could not face the fact that they have cancer. Under such confused circumstances, each patient, of course, has difficulty choosing what kind of treatment he or she wants to have and, at the terminal stage, the decision of how one wishes to die is made by family



members, not by the individual. These medical and social situations often bring gloomy and, especially for the patient, painful stories as detailed in the first half of this book. Presenting five moving stories, the author emphasizes the problems with the present system of terminal care for cancer patients in Japan and stresses the necessity for hospice, where patients can have compassionate, humane care. While this is not a scientific book, the author points out the problems that Japanese society has to face and