Historical Case 2—Allocating Penicillin

Penicillin’s ability to kill bacteria was discovered by chance in 1928. Scottish biologist and pharmacologist Alexander Fleming noticed that mold had crept into several of the culture dishes he was using in an experiment and stopped the growth of bacteria in these dishes. Fleming published his discovery but did not advance the research much further. In 1939, Australian scientist Howard Florey and a group of researchers at Oxford University, including Ernst Chain and Norman Heatley, conducted additional research and successfully developed penicillin as an antibiotic. Penicillin is a chemical found in the type of mold in Fleming’s dishes. Florey and Chain found that the drug could cure infections among soldiers wounded in World War II or people who contracted infections from blisters or cuts or from other bacterial diseases, including syphilis and gonorrhea. Fleming, Florey, and Chain shared the Nobel Prize in Physiology or Medicine in 1945 for their work with penicillin.

At first, penicillin was available only to military personnel. Medical criteria were used to determine who received it. As penicillin production increased, the drug was made available to civilians. The Committee on Chemotherapeutic and Other Agents (COC), an independent group of leading U.S. academic physicians, developed guidelines for the clinical use of penicillin. By 1943, public demand for the drug was far greater than the supply. The COC guidelines were used to determine who received the drug and who did not.

Stop reading here and write your answer to the question below before turning to the next page.

In your opinion, what would have been the fairest guidelines for distributing the penicillin?
The COC distributed the penicillin mostly on the basis of how serious the person’s infection was. The committee also wanted to find out more about whether penicillin would cure some rare diseases. So, they sometimes gave the penicillin to people with rare diseases even if they weren’t as sick as people with more common infections.

Write your answer to the questions below.

Do you agree with how the COC distributed the penicillin? Why or why not?