Studies cite drug overuse in hospitals

A series of studies presented last week to the Senate Health Subcommittee indicates that more than half of the antibiotics used in hospitals across the country are either incorrectly prescribed or not needed at all, and can result in needless adverse reactions, unnecessary expenditures and longer hospitalization for some patients. In addition, according to James V. Visconti of Ohio State University’s College of Pharmacy, the unnecessary prescriptions are costing the nation as much as $200 million a year.

Visconti and Charles C. Edwards, assistant surgeon general for health at the Department of Health, Education and Welfare (HEW) cited before the committee numerous studies documenting overprescription. In one such study, conducted by Visconti and A. W. Roberts in 1972, out of 1,045 monitored patients, 340 were receiving antimicrobial drugs. “Only 13 percent of the therapies were judged rational by the physician and pharmacist review team; 65 percent were judged irrational and 22 percent were considered questionable,” Edwards says.

Edwards partly blames the drug problem on “inadequate drug information” and adds that there are over 35,000 prescription drug products on the market, all clamoring for the physician’s attention.

“There is today no single well-organized comprehensive source of practical prescribing information for the physician,” Edwards points out. “The Physicians’ Desk Reference (PDR), the most widely used information source, contains complete FDA approved labeling for many drugs, but only those promoted by manufacturers who buy space in the book. The physician wishing to evaluate all his therapeutic options will have difficulty finding them in the PDR.”

Sidney M. Wolfe, director of Ralph Nader’s Health Resource Group, finds fault with the pharmaceutical industry for overprescription, that is, he believes that many doctors will prescribe drugs not on a diagnosis but “on the basis of those symptoms for which the drug is promoted.”

Says Wolfe: “A well trained actor could probably prescribe drugs as rationally as the thousands of American doctors. Until detailing of drugs and all other forms of educating doctors about pharmacotherapeutics gain freedom from the bias of the drug companies, the present epidemic of ‘ethical’ drug abuse is sure to continue.”

New approach: Conquering malaria

At the end of 1972, 73 percent of the 1.84 billion people living in the original malarial areas of the world were in areas where the mosquitoes that carry the malarial parasites had been eradicated, or where eradication programs were in progress. Still, malaria continues to be the major parasitic disease of the tropics. Millions of people in Africa and Asia have it (SN: 2/9/74, p. 88). Even if all these people could be treated with drugs, the drugs might not work because the incidence and number of drug-resistant malarial parasitic strains are on the rise.

A new approach to treating patients with malaria is being explored by Michael R. Levy of Southern Illinois University, W. A. Siddiqui of the University of Hawaii and S. C. Chou of the University of Hawaii School of Medicine. It would consist of giving a patient a drug that inhibits proteolytic enzymes in the malarial parasite. The parasite needs these enzymes to break down hemoglobin in the red blood cells of its victim. It presumably also needs these enzymes to break down some of its own cell parts when it gets into the red blood cell of its host.

How present drugs kill malarial parasites is uncertain. There is some evidence that the drugs attack the parasites’ DNA (genetic material).

Although the new approach probably wouldn’t keep malarial parasites from becoming drug-resistant, at least it should give them one more chemical hurdle to overcome. “The more drugs