

prescription drugs, including penicillin, digitalis preparations, sedatives, anti-infective preparations, diuretics and tranquilizers.

Senator NELSON. You are saying 20 percent of the untoward reactions are from nonprescription drugs?

Dr. CLUFF. Of those reactions patients acquire outside the hospital which require admission to the hospital. This is a designation of a specific group of patients. They are admitted to the hospital because of an illness caused by drugs, and of those illnesses caused by drugs requiring admission to the hospital, approximately 20 percent are attributable to nonprescription drugs.

Senator NELSON. Are these statistics—were your studies such as to be able to say that these statistics would apply on the average?

Dr. CLUFF. Yes, I think so. No similar studies of this kind that I am aware of have been performed elsewhere, and I am sure that this committee has heard of the studies done by Schimmel at Yale. Other similar studies are now being conducted but I don't know of any specific study that designates the statistical data as I have indicated it to you thus far.

Senator NELSON. What are some of the drugs which cause bad reaction, nonprescription?

Dr. CLUFF. I have mentioned one, phenolphthalein. Some of the others are bromide-containing sedatives. I did not bring my data with me, Senator Nelson. If this kind of information is pertinent to your committee's deliberations I would be happy to provide such data for your committee by sending it to Mr. Gordon.

But the preparations that I can list which I do recall are bromide-containing sedatives as well as antacids. And the phenolphthalein laxatives, as I have indicated.

Senator NELSON. You say that 20 percent of the untoward reactions were nonprescription drugs and 80 percent were prescription drugs.

Dr. CLUFF. Yes.

Senator NELSON. What are the most common drugs that cause some untoward reactions?

Dr. CLUFF. Well, I will just list some of them. Again I don't wish to imply that the list I am giving you is necessarily complete by any means but these will serve as illustrative examples. If this is data you care to have, I will be happy to send it to you.

An example would be penicillin, tetracycline, sulfonamide, digitalis, phenylbutazone, and indomethacin.

Senator NELSON. What are they used for?

Dr. CLUFF. Penicillin, of course, is an antibiotic, indomethacin is a drug with the trade name, Indocin, a drug which recently has been under scrutiny by the Food and Drug Administration.

Senator NELSON. Recently what?

Dr. CLUFF. Under scrutiny by the Food and Drug Administration and is a drug used for treatment of rheumatic complaints. Phenylbutazone is similarly used for treatment of rheumatism.

Tetracycline is an antimicrobial agent. Digitoxin, often in combination with a diuretic drug with the generic name chlorothiazide and another quinidine, a drug used to control cardiac rhythm.

These give you some illustrations of the type of prescription drugs which we have observed to be involved in drug reactions producing illness requiring admission to the hospital, as well as reaction to drugs which we see occurring in the hospital itself.