

What other steps might be taken? We have considered restricting the use of chloramphenicol to hospitals. However, aside from the legal problems involved, we have learned that more than half the chloramphenicol distributed in this country is purchased by, and presumably used in, hospitals.

Senator NELSON. How do you get a record of that kind?

Dr. GODDARD. The Goslin survey is one source of that information. Also we received from the company earlier this week detailed records showing that 59 percent of their drug was shipped to hospitals for their use. Now, that might be somewhat misleading. Fifty-nine percent would represent a maximum, Senator, because it includes hospitals which would dispense it on an outpatient basis.

A substantial amount is used.

I do have the Chloromycetin figures handed to me. These are from the firm. The estimated distribution of Chloromycetin to U.S. hospitals in 1967—this is by Parke, Davis—amounted to 18,700 kilograms, or 59 percent of the total kilograms distributed in the United States.

Senator NELSON. Some of that is, as you say, dispensed on an outpatient basis.

Dr. GODDARD. Primarily in the military and veterans' hospitals. Although it may include some of the university hospitals, too.

Senator NELSON. Is there any information or have any studies been made as to the differences among the hospitals in this respect. That is, we had testimony yesterday from one of the doctors that Johns Hopkins, many years ago, initiated the policy of requiring that the chief hematologist, I believe, countersign any prescription for chloramphenicol. Well, obviously in a hospital doing that, I suppose the usage would be generally quite specifically confined to indicated uses, though it might not be where you do not have a therapeutics committee or something.

Is there any information on the differences between hospitals?

Dr. GODDARD. Dr. Ley, do you have any comment on this?

Dr. LEY. We have no overall information which would answer your question, Senator. We have locally explored with four hospitals the proportion of hospital usage which is inpatient, and the portion which is outpatient.

This will vary considerably, and this is a very small sample, so I would be reluctant to predict any generalization which could be applied across the country. It would appear somewhere in the order of a fifth to a sixth of the usage may be in the outpatient clinic of the hospital itself.

We have no means, of course, of determining the amount of the drug which is used in the private physicians' offices of this country. That is the most difficult figure, and one that is almost impossible to obtain.

Senator NELSON. What I was getting at was—is there anything to demonstrate whether, say, teaching hospitals, large hospitals, use less of it for patients than smaller hospitals?

Dr. LEY. I have no information, sir.

Senator NELSON. Please continue.

Dr. GODDARD. In addition, restriction of the drug to hospital use