there was not this wide drug promotion by advertising in medical journals and by promotion by detailmen that the medical profession would discover the drug and its merits and its appropriate uses just as well.

Dr. MOSER. Yes I do. And I will speak to that as we progress.

I will briefly summarize some of the efforts that have been made in this area. Both AMA and the FDA became immersed in the business of trying to obtain data on adverse drug reactions. The AMA had a potential information source of over 7,000 hospitals and 250,000 physicians. How many reports were received? The total as of December 1968 was 8,733.

Senator NELSON. From what date to what date?

Dr. MOSER. I think the study actually began in the early 1960s with the registry on blood dyscrasias and is still going on.

At times the quality and the accuracy of these reports was appalling. However, the original registry on blood dyscrasias fed information back to the profession in the form of semiannual tabulations. And these provided much helpful information. For example, knowledge of chloramphenicol and dipyrone toxicity was documented and facilitated through this mechanism.

Senator NELSON. We had rather extensive testimony here by a number of distinguished experts on the misuse or the use of chloramphenicol for nonindicated cases. Testimony, unrefuted thus far at least by any witnesses, including the drug industry was that anywhere from 90 to 99 percent of the patients who received chloramphenicol received it for nonindicated cases.

Now, if the toxicity of chloramphenicol was documented, why was there a failure to convey this information adequately to the medical profession?

Dr. MOSER. I can't answer that, Senator. I think the information has been abundantly available from many sources.

I am familiar with Dr. Best's report that received fairly wide dissemination in the Journal of the AMA and there has been information in the the Medical Letter. Virtually every publication that has come out in recent years has carried admonitions about careful selection of indications in the use of chloramphenicol.

It is difficult for me to understand how this information is not very broadly used. And I would be inclined to think—at least let's say I hope, that this misuse of chlormaphenicol is limited to a very few physicians. The actual indications are quite restricted and if the drug is used without proper indication, it is very bad. It is dreadful.

I can't answer your questions as to why it continues to be used without proper indication.

Senator NELSON. Well, if the testimony and the information we have is correct, approximately 4 million people are prescribed chloramphenicol annually. We have had estimates here from—I am not attributing this estimate to any one of these people—Dr. Dameshek from Mount Sinai, Dr. Best, Dr. Lepper, and two or three others, that anywhere from perhaps 10,000 or 15,000 to 20,000 out of the 4 million received this drug for an indicated case. This seems to me to involve a tremendous amount of misprescribing; if it is 4 million, the other 3,900,000 shouldn't have received it at all.

Have you followed, have you noticed, the advertising in the medical journals of chlormaphenicol?