First, we must bolster research on reproductive processes.

Senator NELSON. How much research is being done—when you say reproductive processes, what do you mean by that?

Dr. CORFMAN. I mean research on how the reproductive process works in humans and in experimental animals, because work in animals is so important to human experience.

Senator NELSON. All right. How much research is being done now by the Government and privately that we know of?

Dr. CORFMAN. Is your measurement money? If it is, I would say that NIH supports reproductive biology, at about $15 million this year.

Senator NELSON. On research in the field of reproductive processes?

Dr. CORFMAN. Yes. It's difficult to define the field precisely. But I would say it would be something in that order.

Senator NELSON. How much of that is in-house research, so to speak, and how much is with arrangements with private researchers or medical schools?

Dr. CORFMAN. Most of it is through grants and contracts with outside investigators. There is some work under way in NIH laboratories, but it is a relatively small proportion of the total.

Senator NELSON. At what level do you think it ought to be done, what expenditure ought to be made?

Dr. CORFMAN. It is hard to answer that precisely because so much of the work would also be related to the development of new contraceptives.

I would like to pursue the thought I was trying to develop on needed research. The second category would be clinical studies of the topics that have been brought to the attention of this committee. By this I mean studies of metabolic effects, the effect on lipids, cancer and thromboembolism, for instance. These would be clinical studies in private patients and clients of family planning clinics.

The third category of research is the kinds of studies that Dr. Seigel represents: epidemiological and statistical studies. These studies are necessary to tell us the true meaning of the clinical observations.

I believe the thromboembolism story provides a good example of what kinds of studies are needed. The story started with clinical observations, letters to the British Medical Journal, and case reports in the Swedish and American literature. These observations brought this problem to the attention of medical science, but it was not for several years, five or six at least, until well-designed, carefully controlled studies were undertaken to show that there is indeed a positive relationship between the use of the pills and oral contraceptives.

We are still in the early stage with the other problems that have been discussed, such as cancer, hypertension, and diabetes.

Senator NELSON. Dr. Salhanick mentioned the question of dose response.

Dr. CORFMAN. Yes.

Senator NELSON. Are any studies planned in that area now?

Dr. CORFMAN. I know that there has been some work done on trying to attain a dose response with the so-called minipill, with progestogens alone. If you wish, I shall be pleased to recommend people who might be able to speak on this subject.