Do you find this a corroboration of your early study?

Dr. Whitelaw. This is correct.

I only mentioned the direct effect. There are two effects. I mentioned here really the effects on the ovaries, which are apparent and can be measured very easily. The other effect is the effect that Dr. Behrman mentioned, and that is that it upsets the mechanism which stimulates ovulation. There are two types of hormones, and these two types of hormones have to click exactly in order to have ovulation, and the oral contraceptives upset it. Exactly how they upset it we do not know. But, you see, we do know that a certain percentage of drugs do cause marked alterations in the gland that is called the hypothalmus, which functions as a master gland for the pituitary. So that undoubtedly what Dr. Behrman says is 100 percent correct. I agree with it.

Mr. Gordon. Now, assuming that 8.5 million people, women, take it in the United States, and if we applied the 1 or 2 percent figures, the conclusion would be then that 85,000 to 170,000 women will become

permanently sterile in the United States.

Dr. WHITELAW. Well, I have stated that I think there is a 10-percent increase in the infertility rate, and the infertility rate is normally roughly between 8 and 10 percent. This therefore indicates a marked increase in the infertility problem.

Senator Nelson. Is there any statistical evidence to indicate how much of that 10 percent is temporary and how much, if any, is

Dr. Whitelaw. There is no way at the present time. There are two types of infertility cases; due to oral contraception those that have what we call an atrophy of the lining of the uterus, these cases respond exceedingly poorly. There are very, very few of these cases that have ever conceived.

The other type of patient who has a normal anovulatory lining, which shows some estrogenic activity, these women may respond, but my contention is very simply why should it be necessary when a woman wants to have a baby to spend \$200 or \$300 for examinations after she goes off oral contraceptives and then be put on some other drugs, both of which were until recently highly experimental, and which can lead to multiple births, when it is entirely unnecessary unless she was willing to run the risk herself, and she should be told that. It is her baby, I think.

Mr. Gordon. Dr. Whitelaw, minority counsel just showed me, just showed the chairman, too, three letters which appeared in the Journal of the American Medical Association shortly after the publication of

your paper.

Dr. WHITELAW. That is right.

Mr. Gordon. I happen to know about these letters.

Now, would you be so kind as to explain the reaction to your article

after it appeared in the Journal.

Dr. WHITELAW. There was a violent reaction from those individuals, from all the individuals, that were connected with the investigation of oral contraceptives, and they stated in no uncertain terms that this article was entirely unscientific, it was biased, and it had no business being even published. This was by one of the men who is going to testify, as I understand it, here.