readily supplementable by the surgical interruption of unaverted pregnancies by qualified physicians, I can visualize only a rare circumstance indeed in which I would recommend estrogen-progestagen mixtures for contraceptive use.

Thank you.

Mr. Duffy. Doctor, when you say surgical interruption, would the layman's term be abortion?

Dr. Hertz. Yes, the medical term also. What I used was a circum-

locution.

Senator Nelson. You are familiar with the studies, I am sure, made by the British and announced recently asserting that, if I understand them correctly, that pills with more than 50 micrograms of estrogen caused a higher incidence of blood clotting? Are you familiar with that? Have you seen the studies themselves?

Dr. Hertz. I don't believe anybody that I know of in this country has yet had the privilege of a detailed analysis of the data. We are to have a meeting next week with the advisory group and I would anticipate that this may very well be a part of the subject matter of that

meeting.

Dr. Sartwell's data, who was a member of our group, included information which would indicate presumptively, but not definitively, that this association of the increased incidence of thromboembolic phenomena with the higher level of estrogens is probably correct. And also on other clinical grounds we would expect this.

Women given estrogens alone for the suppression of lactation right after the delivery of their babies, if they don't want to nurse their young, have been shown in one study to have a higher frequency of thromboembolic phenomena than women not given such estrogens.

In addition, older men, and this is not applicable to young women but to older men, with prostate cancer who are given estrogens for the control of prostate cancer, are shown to have a higher frequency of cerebral accidents than a controlled population of older men with prostate cancer not given the estrogens. This is a study very comprehensively conducted by the Veterans' Administration.

So for all these reasons, Senator Nelson, we would infer that the estrogenic component is probably a critical factor in the clotting

problem.

Senator Nelson. As one who is a member of the Population Council, and I assume, therefore, constantly exposed to the practices involved in the prescribing or using of contraceptive devices, do you have any specific information or do you have an educated guess about what percentage of the women who take the pill, do, in fact, have a periodic examination once every 6 to 12 months as you advised or once every 12 months as I recall Dr. Kistner advises in his book? Do you have any notion of percentage of women who have that periodic 6- to 12-month examination including a Paps smear?

Dr. Hertz. Are you speaking of American women?

Senator Nelson. I would start there and ask you what you think

of—— Dr. Hertz. This would be a difficult estimate to make even for women in the United States. We do know if we take the total number of smears processed by members of the American Association of Pathologists and accept their estimate of the total number of smears processed by