Senator NELSON. You say it will mean that women who choose oral contraceptives are somehow different from women who choose other methods, even before the medication is begun.

Are you saying that the difference in the physiological makeup of a woman who selects an oral contraceptive and not the chemicals in the oral contraceptive cause the cervical dysplasia?

Dr. CORFMAN. Partially. It looks as if there is something about women who choose oral contraceptives which make them more susceptible to this condition than women who do not choose oral contraceptives.

Dr. SEIGEL. Could I elaborate on that, Dr. Corfman?

Senator NELSON. Yes.

Dr. SEIGEL. A number of differences have been observed in oral contraceptive users and users of other methods. These include age, for example, religion, education.

Now, epidemiologists have known for some time that certain sexual practices seem to be associated with the risk of cervical cancer.

The sexual practices in women who use oral contraceptives may be different from those of women who do not. These differences may occur in frequency of intercourse, number of partners, and age at first marriage, which have all been related to the incidence of this disease. This illustrates one of the major problems in doing studies of disease in women on oral contraceptives.

Dr. CORFMAN. Our two other cancer studies have recently been approved. Their purpose is to determine if breast and uterine cancer occur with greater frequency in women using oral contraceptives than in other women. Research experience in animals makes it mandatory that this relationship in humans be carefully studied. Even if oral contraceptives do cause cancer it may not show itself for some years, as has been pointed out before to this committee.

Nevertheless, we think it is imperative to begin to monitor this condition so that we can learn as rapidly as possible whether there is any increase in the incidence of cancer in women using these drugs. It will be of equal importance to learn that no increased risk is observable.

We also have concern for thromboembolic disease of various kinds. For example, we have just initiated a study of cerebral vascular disease. Although some information is available that points to a relation between steroid contraceptive use and this condition, the number of cases studied is relatively small and many questions remain unanswered. It is particularly important to discover if some drugs are more dangerous than others. We also wish to know if we can identify the type of women who may be especially prone to this condition. The new study now underway should provide these types of information within 2 years.

Our own staff, particularly Dr. Seigel, have been active in analyzing trends of mortality from thromboembolism in the United States for women in the reproductive ages. Dr. Seigel and a colleague of his, Dr. Markush, have published a paper on this subject. The purpose was to see if the rates have shown unexpected increases since introduction of steroid contraceptives. They found no increase in arteriosclerotic heart disease or in embolism to the brain but there was a demonstrated increase in embolism to the lungs. The amount of in-