

logical effects, and of the difficulties of deciding whether a particular side effect is truly related to the chemicals in the pill, to other factors such as psychological influences, or to pure coincidence.

I should like to emphasize that I am not saying that side effects do not exist. I am saying that it is very difficult to distinguish pill-caused side effects from non-pill-caused side effects. Those who have very positive opinions about this either have double-blind studies that I am not familiar with, or perhaps do not recognize the difficulty of truly and objectively assessing this problem.

There are important side effects which occur rarely and which a knowledgeable physician would not ignore. In rare instances, the development of high blood pressure, of certain types of migraine headaches, of jaundice, is unquestionably attributable to a hypersensitivity of the individual to some or all of the components of a birth control pill. Hypersensitivity to drugs is nothing new. Important adverse reactions occur with all drugs, as has been brought out in these hearings a number of times. There are fatalities from medicines as innocuous as smallpox vaccine. It is the responsibility of the prescribing physician to know these matters, and to sort out the danger signs from other information that the patient presents. This is part of the art and science of medicine. The patient is not well served by being asked to be his own diagnostician, by being given a list of possible complaints and dangers. Such information, which the ordinary untrained person cannot possibly use with insight and discrimination, serves only to confuse the situation, and make matters more difficult for the conscientious physician.

The next paragraph of my prepared statement deals with the question of metabolic effects. I should like to pass this by, for the simple reason that you have heard Dr. Laragh, you will hear Dr. Spellacy, and many other experts on the subject. I should like to make one comment, which is that the metabolic effects, most of which are quite similar to what is seen in pregnancy, have been described and known for a long time in that state. Thus they do not present anything fundamentally novel.

There are areas of agreement and areas of controversy. Where the certainty stops is exactly what has been pointed out today. The possible clinical inferences which can be drawn from these objective observations, and the point of assigning casual relationships is where scientists begin to disagree. Where I draw the line is, that if I take one supposition, add it on another supposition, then take on a third supposition—three probabilities which I do not know—and then conclude that I should take some positive action with respect to a particular patient, I am doing exactly what the scholasticists did 600 years ago when they argued about how many angels fit on the head of a pin.

I do not deny that it is a big disadvantage of the pill to have such widespread effects. An ideal contraceptive ought to have a single, highly selective action at some critical point in the reproductive process, and no other effects anywhere else in the body. All scientists recognize this point, and much work is being done to develop new classes of contraceptive agents which are more selective in their site of action.

I would not like to go in any depth into the problem of carcinogenesis. You have heard Dr. Hertz, with whom I have debated for