

case matching. However, the American study also has serious drawbacks, which cause many statisticians to worry about the conclusions. One problem is shown in the following table:

RELATIVE RISK OF USING ORAL CONTRACEPTIVES, BY CITY (SARTWELL STUDY, 1969)

City	Number of matched pairs	Relative risk of thrombophlebitis (user/nonuser)	Statistical significance
Baltimore and Washington, D.C.-----	26	2.2	N.S.
Pittsburgh-----	25	3.0	N.S.
New York-----	83	4.2	P<.01.
Philadelphia-----	41	17.0	P<.001.

The American study included subjects from five large cities; they were supposed to be selected and matched in identical fashion. However, when one looks at the relative risk of taking pills in the different cities, something extremely interesting emerges. In Baltimore, Washington and Pittsburgh an increased risk, if it exists at all, could not be shown statistically. In New York, Pill-takers were clearly at four times the risk of thrombosis as non-Pill-takers, and in Philadelphia, Pill-takers were at 17 times the risk as the controls. Are we to conclude that people who want to take Pills should move from Philadelphia and New York to the other cities? Is there something mysterious about Philadelphia and New York that makes taking Pills there more risky? Or—as is more likely—is this simply internal evidence in the study that the matching was not homogeneous from city to city? If the latter is true—and this seems to be the most likely explanation—the validity of the whole work comes into question, since the very foundation of the retrospective study is shaken.

Although the British and the American studies concur in ascribing all risk of thrombosis to the use of the Pills, there are important differences which no one has as yet satisfactorily explained. The risk reported in British women is twice as great as that in the American study. Why should this be? The British found a three times greater risk in older women than in younger women; no such difference was found in the American study. The British study found an increased risk of cerebral thrombosis; the American study did not. Such inconsistencies do not increase our confidence in the conclusions of these studies, or in the applicability of British data to American women.

Nevertheless, it is a fact that a number of studies (all of the same sort, it must be admitted) concur in the conclusion that there appears to be some increased risk. Until proper studies are carried out and the truth of the matter is firmly established, it seems prudent to act on the assumption that a risk—a very small risk, it is true, but still a risk—exists. It therefore becomes important to assess this risk in the perspective of the risks that would face potential Pill-takers if they did not take the Pill. This leads directly to the next question.

Question 4. What is an acceptable risk of death from the Pill?

Answer: There is no simple answer to this question either.

There are those, of course, who say that noncontracepting women are healthy women, and that *no* risk is acceptable. This statement is incorrect from the start, since even the WHO definition of health states that, "Health is a state of complete physical, mental and social well-being, and not merely the absence of disease." Moreover, noncontracepting women are very much at risk—at risk of pregnancy: and pregnancy has associated with it a very real death rate. This death rate depends on social and economic status. Among our more privileged citizens, those who have access to good obstetrical care, it is as low as 250 deaths per million pregnancies. In our underprivileged minority groups, the death rate is five times higher. Thus, in one year, of a million noncontracepting women 800,000 will end up pregnant, and 200 to 1,000 of these women can expect to die as a result of the pregnancy. How can anyone say that there is no risk without the Pill? There are, of course, other methods of contraception which carry with them no risk of death from the method itself. With the "rhythm method" there will be no "method risk", but lots of pregnancies—about 230,000 per million women per year, in fact. Of these 230,000 women, from 60 to 300 will die as a result of the pregnancy. The older mechanical devices such as condoms and diaphragms give better protection, but still 100,000 or more will get pregnant of a million women that use these methods. There will be no method deaths, but the deaths