

The Pill

THE introduction of efficient methods of contraception has been one of the scientific revolutions of the twentieth century. In the UK the oral contraceptive pill is the most popular medical method of contraception and general practitioners are far and away the most usual providers. In 1977 about a quarter of all the women in Britain between the ages of 15 and 44 are taking the Pill and their number may still be increasing.

Against this background of mass medication, it was obviously essential that there should be a controlled prospective scientific trial of the effects on women of these hormones carried out over a long period of time. The administrative organization of the British NHS is well suited for such a study because it normally ensures an individual medical record for each person, co-ordination of all medical events through the general-practitioner record, and, most important of all, continuity of medical care through general practice for many years.

Exploiting this situation, the research units of the Royal College of General Practitioners, especially the Birmingham Unit, pioneered morbidity studies and built up a body of knowledge on such topics as confidentiality, data recording, and analysis. The Birmingham Research Unit established that co-ordinated collective research by general practitioners in Britain was possible.

The Manchester Unit of the College developed this principle further by pioneering the largest multiobserver prospective study of effects of a prescribed drug carried out anywhere in the world. Supported by a substantial grant from the Medical Research Council, as well as other financial support, and energetically led by Dr Clifford Kay, 1,400 general practitioners were recruited when the study started in 1968.

The essential feature was the recording of all items of morbidity known to the general practitioners, and the selection by each contributing practitioner of a control matched for sex, age, and marital status.

A series of reports has emerged, of which *Oral Contraceptives and Health* (RCGP, 1974) is the best known.

Deaths from cardiovascular causes

Within the last few weeks, however, a new and extremely important paper has been published from the Manchester Unit of the College (1977). This consists of a detailed analysis of the death rate in the women studied in comparison with their controls. It shows for the first time a small but statistically significant increase in the number of deaths reported to be due to diseases of the cardiovascular system in those women who are taking or have at some previous time taken the Pill.

The excess deaths in the 'ever-user' group is substantially greater than the excess deaths associated with the larger number of pregnancies in the control group.

The important evidence from this paper shows that the increase in deaths is predominantly concentrated among women over the age of 35, in those who have taken oral contraceptives continuously for five or more years, and in those who also smoke.

The evidence strongly suggests that women who have taken the Pill in the past but who have now stopped it (ex-takers) still have a higher risk of death from diseases of the cardiovascular system than women who have never taken it at all. Grouping the deaths under the broad category of circulatory conditions means a new perspective is obtained, which suggests a considerably wider effect of hormones on the cardiovascular system than the analyses previously published, which have tended to concentrate on a limited number of diseases.

The future

This new evidence needs careful examination by all those now advising about contraception. It is particularly important to general practitioners who have long favoured the Pill as their main choice of contraceptive method. The implications are clearly that the Pill should be seriously reconsidered for any woman over the age of 35 and, if possible, avoided for those in this age group who also smoke. The longer the Pill has been taken continuously the more it should be questioned.

Nevertheless, all drugs carry risks and the choice for any individual patient must always represent a balanced judgement, taking all factors into account. Unfortunately, all alternative methods of contraception have some difficulty or problem and the ideal contraceptive simply does not exist. This development further strengthens those, including the Royal College of General Practitioners, who have argued that the prescription of oral contraceptives should remain the decision of a registered medical practitioner. The final decision on this, as on all other potent pharmaceuticals, must be taken by the individual patient in the light of the best available advice from her chosen doctor.

Disturbing though the evidence may be, we welcome the continuation of this important research study from general practice. The Medical Research Council must be congratulated on financing it and the participating general practitioners, most of whom are members of the College, can continue to see the value of their regular reports.

References

- Royal College of General Practitioners (1974). *Oral Contraceptives and Health*. London: Pitman.
- Royal College of General Practitioners (1977). *Lancet*, ii, 727-736.