Surely the classical process is from the general to the particular, and by going from the particular to the general they have got the process upside down. Either disease is a "unified concept" or it is not a concept at all.

To end with I will ask two questions. How do they define the corresponding concept health? Is it possible that we are all, lay and professional alike, pursuing a mirage in our National Health Service?

F S A DORAN

Hereford Postgraduate Medical Centre,
County Hospital,
Hereford

¹ Collingwood, R G, *Philosophical Method*. London, Oxford University Press, 1933.

² Dampier-Whetham, W C, *A History of Science*. London, Cambridge University Press, 1929.

³ Russell, B, *History of Western Philosophy*. London, Allen and Unwin, 1946.

⁴ Zeller, E, *Outlines of the History of Greek Philosophy*. London, Kegan Paul, 1931.

SIR,—Interesting though the results of Dr E J M Campbell and others (29 September, p 757) are, their final definition still seems far from adequate, since it begs the question of what is a biological disadvantage. For example, if with Kendell¹ one regards decreased reproductive ability as a biological disadvantage, and therefore considers homosexuality to be a disease, one is equally compelled, as I have argued previously,² so to regard celibacy.

Desirable though it may be, a value-free concept of disease seems to be an impossibility. The purpose of defining a phenomenon as a disease is not merely to study it but to seek to effect a change—to cure it or alleviate its symptoms. This requires a value judgment by the patient, the doctor, or both that the disease state is a bad thing and should if possible be altered.

To attempt to define disease independently of the possibility of its treatment can lead only to "sterile semantic disputes."

P D TOON

Merton College,
Oxford

¹ Kendell, R E, *British Journal of Psychiatry*, 1975 **127**, 305.

² Toon, P D, *British Journal of Psychiatry*, 1976, **128**, 99.

SIR,—In Western medicine we have become far too dogmatic in our approach to the concept of disease. As the article by Dr E J M Campbell and others (29 September, p 757) states, doctors tend to look on disease as always being scientifically explicable, whether they have an essentialist approach (we know what causes it) or a nominalist approach (we can name the syndrome and we are going to find out what causes it). Furthermore, disease has become "doctor orientated" and if the ill person does not feel the doctor can help then the patient may feel he has not got a real disease.

Perhaps we could draw from the Chinese ideas of disease. This philosophy does not fit into the rigid categories of scientific medicine but it is much more flexible and sensitive. When the body's energy is not balanced, the patient feels unwell and this condition of imbalance is disease. This does not necessarily mean that all disease must be treated but the emphasis is directed towards the patient rather than towards the doctor's ability to treat the patient.

I feel that an over-analytical approach to problems such as disease is blinding us to

the task of solving the problems which we face in day-to-day medicine.

G T LEWTH

Lymington, Hants SO4 0BA

Iatrogenic collapse

SIR,—I would like to support Dr P K Schutte's recommendation to give atropine before fitting an intrauterine contraceptive device to prevent a vasovagal attack (8 September, p 608).

For the last seven or eight years I have used Pamergan AP100/25 prior to fitting an IUCD for between 80 and 100 patients—those who have been very nervous or where the procedure has been likely to be prolonged—that is, removing a tail-less device before replacing it with another one. Pamergan contains atropine sulphate 0.6 mg, pethidine hydrochloride 100 mg, and promethazine hydrochloride 25 mg. Patients who have had this injection once nearly always ask to have Pamergan again for the next IUCD refit.

Pamergan AP100/25 is listed for pre-anaesthetic medication, either 1 ml intramuscularly or after dilution to 10 ml for intravenous injection. I withdraw blood into the syringe to mix Pamergan before giving it by slow intravenous injection. This is effective as soon as the injection is completed and patients are quite able to dress themselves afterwards and wait in an examination or side room until collected by a friend. No patient has had a vasovagal attack when I have used this method.

K M HUNTINGTON

London SW3 6PX

Reproductive mortality

SIR,—Dr Valerie Beral is right to point to the inadequacies of using maternal mortality as an effective measure of reproductive health (15 September, p 632). May I suggest, however, that oral contraceptive use is not the only important added risk factor in reproductive health?

A measure of reproductive mortality would be more comprehensive if it also included an assessment of the effects of cigarette smoking, which are known—especially in combination with the pill—to increase the risk of both subarachnoid haemorrhage and myocardial infarction 22-fold and 10-fold respectively compared with non-smoking women not on the pill. Furthermore, any accurate assessment of the relative contribution of oral contraceptives to the risk of cardiovascular disease must take into account the fact that women taking the pill tend to smoke more, on average, than those not taking it, and more again than pregnant women.

BOBBIE JACOBSON

Middlesex Hospital Medical School,
London W1

SIR,—The article by Dr Valerie Beral on reproductive mortality (15 September, p 632) has introduced an interesting and possibly useful new term into mortality statistics, but her claim that there were more deaths for women of 25-44 years in England and Wales from the adverse effects of oral contraceptives than from all the complications of pregnancy, delivery, and the puerperium combined is dependent on so many questionable assumptions, inconsistencies, and omissions that its truth must be doubted.

The whole of Dr Beral's argument rests on estimates for the adverse effects of contraception, the figures being derived from "prevalence of pill and IUCD use and from reports of the mortality related to their use," for which the two quoted sources were the Royal College of General Practitioners' study¹ and a study by Kahn and Tyler.² Dr Beral admits to seven major assumptions; there are at least four others in the text of the paper, and she also relies on assumptions which other authors may have made. Clearly, the more assumptions that are made and the more significant they are, the less reliance one can place on the conclusions.

One of her assumptions, derived from the RCGP study, is that "the excess mortality among pill users was confined to circulatory disease." By using this assumption uncritically, Dr Beral has not calculated the *overall* mortality rate reported by the RCGP Study. Inspection of table II of that study shows that there were 23 deaths in ever-users and five in controls for hypertension, infarction, cerebrovascular disease, etc—an excess of 18. Yet for malignant disease there were six more deaths in the control group than in the ever-users, and for infections two more. If the term reproductive mortality is to be used properly, then the protective effect as well as the (alleged) adverse effect must be taken into account. By including only the negative side of the equation in her estimates Dr Beral has introduced a strong bias in favour of her hypothesis.

A second major assumption is that the findings of the RCGP study on excess mortality from circulatory disease in ever-users of the pill are applicable to current users of the pill. The RCGP study began in 1968 and the publication included data up to June 1976; since pills containing 30 µg of oestrogen were introduced only in early 1974, it is clear that the majority of women for the major part of the RCGP survey were taking pills of 50 µg or above. Yet the latest available figures show that in 1978 60% of pill users took a 30 µg pill and only 32.8% took 50 µg or above. It is thus apparent that the RCGP results cannot be extrapolated to pill-users in 1979.

If I may turn now to the second source of estimates,² Dr Beral states that "40% of the deaths on which the mortality estimate was based were due to sepsis complicating an accidental pregnancy..."; but she omits to mention that this figure of 40% was based solely on two women during a postal survey conducted in the USA. I mention this particular aspect not because an increase or decrease in the estimate for mortality from intrauterine contraceptive devices will significantly alter the results, but in order to show the trivial numbers which are used in some parts of this paper to assist the argument.

Lastly, Dr Beral has not tackled the central problem of the mortality statistics arising out of the RCGP study on which her current paper mainly relies, which is this: if there is *any* increased risk of mortality in pill takers, how is it that since the introduction of the pill in the USA (where pill use over the last decade in women of reproductive age has averaged approximately 25%) deaths from cardiovascular disease in women have declined—even more steeply than death rates for men of comparable age?³ Indeed, with those data, together with the results of another recent analysis of mortality data (from 21 countries), which failed to find any association between the pill and cardiovascular disease but actually showed some interesting negative correlations,⁴ a good case can be made out for the pill's *protecting* against cardiovascular disease. These trends in the USA are not inconsistent with those in the UK, as shown by a recent publication from the Office of Population Censuses and Surveys,⁵ which stated, "Taking circulatory deaths as a whole the number of male deaths rose by 12% over the (last) 20 years... for women circulatory deaths fell by 24%." The fall in female mortality cannot be ascribed to improvements in medical care, since this would affect male mortality equally; and yet this fall has occurred in the two decades during which women, and women alone, have been exposed in large numbers to the supposedly unique danger of the pill.

In view of the inconsistencies and assumptions made in Dr Beral's paper, as well as the