weight of evidence against her from mortality trends in the USA and the UK, I find it very difficult to accept her conclusions.

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¹ Royal College of General Practitioners, *Lancet*, 1977, 2, 727.

² Kahn, H S, and Tyler, C W, *Journal of the American Medical Association*, 1975, 235, 57.

³ Tietze, C, *Family Planning Perspectives*, 1979, 11, 80.

⁴ Belsey, M A, Russell, Y, and Kinnear, K, *Family Planning Perspectives*, 1979, 11, 84.

⁵ Office of Population Censuses and Surveys, *Trends in Mortality, England and Wales 1951-1975*, London, HMSO, 1978.

* * * We sent a copy of this letter to Dr Beral, whose reply is printed below.—ED, *BMJ*.

SIR,—Dr Wiseman's letter makes several points, which are best answered in the order in which they are raised.

(1) He suggests that had I used data on excess overall mortality in pill users, rather than excess circulatory disease mortality, my conclusions would have been different. He draws attention to the excess deaths from cancer and infections in the control group of the Royal College of General Practitioners' study, but fails to mention that they were balanced by excess deaths from accidents and suicides in the pill takers. Had I used figures for excess overall mortality my findings would not have been materially different.

(2) The RCGP findings may not be applicable to women taking pills containing 30 µg of oestrogen, but my estimates of reproductive mortality were made for the years 1950, 1960, 1970, and 1975. As Dr Wiseman points out, this was before widespread use of the 30 µg pill.

(3) That the number of deaths on which the IUCD-associated mortality was based is small is of little consequence for the calculation of reproductive mortality. As Dr Wiseman points out, the estimated IUCD-associated deaths were so few that they made a negligible contribution to the overall reproductive mortality. The only contraception-associated deaths that made a significant contribution are those related to oral contraceptives. The pill-related mortality rates were based on relatively small numbers as well; but, as I discussed in the original paper, even if the RCGP study overestimated mortality by up to twofold my general conclusions would not be altered.

(4) Whether trends in circulatory disease mortality in young women are compatible with the mortality rates found in the RCGP study is a complex question. The analyses he cites by Tietze and Belsey *et al* have limitations, which have been discussed elsewhere.^{1 2} Comparisons of male and female mortality trends can be useful, but must be made in the context of mortality trends before the pill was introduced. During the 1950s in almost all countries where reliable data exist the mortality rate from all non-rheumatic circulatory diseases fell dramatically in young women. The trends in young men were generally unrelated to the female pattern; the male mortality rates in fact increased in the majority of the countries.³ During the 1960s the rapid fall in female non-rheumatic circulatory-disease mortality was halted and even reversed in countries where pill use was widespread. Where pill use was infrequent female mortality continued to decline. As before, male mortality trends after 1960 bore little relation to the female trends.

Why female circulatory disease mortality declined rapidly during the 1950s, whereas male mortality tended to increase is tantalising—and may well hold an important clue to the aetiology of cardiovascular disease—but this pattern must be recognised before the impact of the pill on mortality trends can be properly assessed.

The reproductive mortality rates estimated by me for England and Wales are necessarily approximate. As data accumulate in the RCGP and other prospective studies, more precise estimates of pill-associated and total reproductive mortality should ultimately be available.

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¹ Beral, V, Kay, C, and Vessey, M, *Family Planning Perspectives*, 1979, 11, 205.

² Beral, V, *Family Planning Perspectives*, 1979, 11, 206.

³ Beral, V, *Lancet*, 1976, 2, 1047.

Obstetric anaesthetic and analgesic services in Wales

SIR,—While we support most of the conclusions drawn by Professor Bryan M Hibbard and others (22 September, p 698) on the provision of obstetric anaesthetic services, we were dismayed by the suggestion that "it would help if resources for epidural analgesia were concentrated in centres that could offer a 24-hour service."

Epidural analgesia is now an integral part of modern obstetric practice and should be available in every consultant maternity unit. The assertion that in only a few cases are there potential medical benefits from epidural analgesia is puzzling when one considers the role of epidural analgesia in the obstetric management of twin pregnancies, breech deliveries, pre-eclamptic toxæmia, forceps deliveries, etc. However, the main medical benefit is surely that the risk of death is less with epidural analgesia than with general anaesthesia.

Rather than concentrate facilities for epidural analgesia in fewer centres, more emphasis must be placed on the provision of fully comprehensive anaesthetic services in every consultant maternity unit. Until we achieve 24-hour cover by skilled anaesthetists in every such unit there will be little decrease in the number of maternal deaths associated with anaesthesia.

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Nutritional standards and saving money on school meals

SIR,—The nutritional content of the school meal received by schoolchildren has been well documented by Professor A E Bender and others (22 September, p 732). It is apparent that some children may be put at nutritional risk if current trends continue. Poor breakfast habits are increasingly common, many children leaving home with no breakfast at all.¹ Thus the midday meal is obviously important to these children and is likely to make a significant contribution to nutrient intake for the majority. For this reason alone we should not compro-

mise on nutritional standards. Suggestions about the abolition of school meals or substitution of snack meals which achieve a nutritional input reflecting current practice should also be questioned.

We would agree with Professor Bender that a snack meal can be as nutritious as a cooked meal. But if children are to select snack meals then more time must be devoted to the nutrition education of the child to help him make appropriate choices. The nutritional quality of the snacks must also be closely defined, supervised, and monitored; and the mistake of matching nutrient content to the standards currently in use rather than those approved by the DHSS should not be condoned. Further, there is a real danger that school snacks will be based on economic tenets instead of nutritional ones. This again reflects the need for close monitoring.

If we, as health professionals, are really concerned with the growth, health, and performance of our schoolchildren, we should strongly resist all attempts to remove school meals or accept lower standards.

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¹ Bender, A E, in *Breakfast and the Changing British Lifestyle*. Manchester, Kellogg's (Great Britain), 1977.

Abnormal smears in pregnancy

SIR,—What are the justifications for interfering with a uterine cervix during pregnancy? In your leading article (29 September, p 753), you deal with the finding of an abnormal smear during pregnancy, not with seeing an established cervical carcinoma. The progression from cervical intraepithelial neoplasia through microinvasion to invasion takes years, so if the cervix appears non-malignant any cytological abnormality can wait at least till the postnatal period before requiring any surgical intervention—whether colposcopy or conisation.

The vast majority of women developing cervical intraepithelial neoplasia have had at least one pregnancy. Those women most at risk of developing cervical cancer are those who are least likely to present themselves for routine screening. They are also those who do not attend for routine postnatal examinations. They must be detected at a time when they present themselves. This is often only at time of pregnancy or on subsequent referral for contraceptive advice. It is the only way they will ever be screened.

The finding of an abnormal smear during pregnancy requires most careful follow-up. A smear is not usually truly positive during pregnancy and then normal in the postpartum period. The conservative regimen has been followed in this region for many years and no case of clinical cervical cancer has developed because of it.

Resources may be limited, but it is customary to take a smear at the time of postnatal examination and it is nonsense to suggest that it costs more to do it antenatally—unless, as only about 60% of women attend for postnatal examination, the economy is in this reduced number; unfortunately it is the 40% who get away who are more likely to have the disease. If economics are of prime importance, let us cease to screen the 60% who attend postnatally