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

and concentrate antenatally on women with multiple partners and multiple pregnancies.

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Psychosocial stress in pregnancy

SIR,—I would like to thank Dr J Dearlove (8 September, p 613) and Dr M O Roland (22 September, p 738) for their interest in our paper (18 August, p 411) and to answer their criticisms.

The women were interviewed three to four days after delivery to minimise the labile emotions associated with the time of delivery. It seems that it is those mothers going to term who have the better recall for those major life events considered to be subjective. We reviewed our results and divided the major life events into those considered to rely on subjective interpretation and those which were purely objective. The subjective life events represented 31% of the total recorded in the group going to term but only 19% of those recorded in the preterm groups combined.

The criticism of methodology is partially valid but there was overlap of interviewers, with two authors interviewing mothers from all three groups. The results from these interviews substantiated the trends seen in the whole sample.

I would emphasise again that few women had been asked about their worries during their pregnancies. I think it noteworthy that no one through your columns has supported our call for better "social" caring in what is probably a good caretaking antenatal service at a time when interest in place of birth is to the fore.

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Appendicectomy and family history

SIR,—The management of possible appendicitis, both at home and in hospital, is indeed influenced and complicated by the presence of past family histories of appendicitis or appendicectomy, as Dr N Andersson and his colleagues have suggested (22 September, p 697). Just over a decade ago I reported some findings from a study which was similar to theirs in intention.¹

Two hundred and four females and 92 males (aged 12-29) who had had histologically inflamed appendices removed at emergency operations for acute abdominal pain were matched for age and sex with patients who had had histologically normal appendices removed at similar operations. All were sent a questionnaire asking how many of their parents and siblings had had their appendices removed. The relatives of female patients who had normal appendices removed included a significant excess with past appendicectomies ($P < 0.01$) when compared with the relatives of those females with acute appendicitis. No such relationship was found with male patients.

These findings confirm that a past history of appendicectomy in the relatives of a patient with abdominal pain is of importance, but suggest that the importance is at least as likely to be behavioural as physical. Another reminder of the importance of behavioural

influences on the management of acute abdominal pain which was reported in the paper was the excess number of normal appendices removed from the members of "medical" families. Dr Andersson's team should think again about how human factors influence the presentation and management of illness before they pursue the possibilities that their interesting findings might have either a dietary or a genetic basis.

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¹ Howie, J G R, *Lancet*, 1968, **1**, 1365.

SIR,—The interesting article "Is appendicitis familial?" by Dr N Andersson and others (22 September, p 697) prompts us to report an extraordinary coincidence in a pair of identical twins.

The first twin sister, aged 10½ years, presented in the afternoon of 24 February 1975 with a typical history of central abdominal pain radiating to the right iliac fossa. On examination there was guarding and tenderness with rebound tenderness. Emergency operation was undertaken in the early evening and an acutely inflamed appendix removed. The patient made an uneventful recovery and histology confirmed the diagnosis "fairly severe acute purulent non-obstructive appendicitis."

Later the same evening we saw the second child, who had been away at a different address and not in contact with her twin sister. She gave an identical history and also had signs of appendicitis with peritonitis. Emergency operation was undertaken the same evening and again an acutely inflamed appendix was removed. Histology confirmed the diagnosis of severe acute purulent appendicitis—in this case due to obstruction by a small faecolith. The patient also made an uneventful recovery.

We are not aware of a previous report of acute appendicitis affecting identical twins at almost the same moment in time. It is interesting that in one twin a faecolith was present causing obstruction, but this was not so in the other twin.

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Accidental injury in children and interrogation of families

SIR,—In recent years there has been increasing pressure upon the profession to recognise cases of non-accidental injury to children. This is very laudable, but we wonder if anyone has actually looked into the effect on an accidentally injured child's family of the typical interrogation procedure to which relatives are now subjected.

A number of cases have recently come to our attention where great distress has been caused by the implied accusation which such questioning brings. Most parents, when under pressure, chastise their children from time to time; and current social mores concerning physical punishment of children lead to the formation of deep guilt feelings, which are easily aroused by injudicious accusations, real or imagined.

Many parents are insecure and uncertain anyway, especially those with known predisposing factors in their case histories, such as being young, having had children in special care units, multiple births, and abnormal children. While the doctor's primary aim is rightly to protect the child from non-

accidental injury it must be remembered that this is achieved only by giving insecure families more support, and that the alienation achieved by what is perceived as a witch hunt is strongly counterproductive. Arguably, the deterioration in relations between parents and health service personnel we have observed may actually lead to more rather than less non-accidental injury.

From these reflections we would like to ask one question and make two recommendations. (1) Has any research been undertaken into the type of interrogation we are considering, to determine its effects? (2) GPs, when referring injured children in whom they are sure that non-accidental injury is unlikely, should say so in their referral letter. (3) Hospital staff should be aware of the sensitive nature of their inquiries and should solicit the views of the GPs and health visitors who know the patients well before any form of confrontation.

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General practice in hospital accident and emergency departments

SIR,—I refer to the article "Changes in demand for initial medical care in general practice and hospital accident and emergency departments" by Dr Joyce M Watson and others (11 August, p 365) and the letter by Major P J Gravett (22 September, p 737).

Dr Watson's article implies that, contrary to the ethic of the GP consultative service, patients have a free choice of the two alternatives. Other than on this point, however, I agree with her comments. Her findings are supported by the Newcastle Accident Report.¹ In themselves they do not disprove the contrary evidence of the Fourth Report from the Expenditure Committee,² but it is reassuring to know that since this was prepared in 1973-4 the situation has not worsened—at least in Glasgow. I was pleased that she drew attention to the ratio of first attenders at accident and emergency departments and GP surgeries. Although her ratio is rather greater than that calculated from Fry's figures³ it does emphasise that failure of a general practitioner to provide emergency cover for one in every 100 of his patients leads to a 6-10% increase in casualty attendances, depending on the number of general practitioners and hospitals in the district.

I would, however, take issue with Major Gravett. He appears to have used Durbin's criteria for appropriate attendance at the accident and emergency department,⁴ although here I would have liked more information. Casualty departments do not treat only trauma—though there are many who, for the sake of a structured organisation, administrative convenience, or even clarity of exposition, would wish that they did. Their function must be seen in social rather than medical terms and it has not changed much since the mediaeval hospice served those displaced and disabled people who were suddenly rendered dependent on their immediate and perhaps estranged neighbour for help.

The spectrum of diagnoses of bona fide attenders is neither all accidents nor all emergencies—nor, in a medical sense, entirely composed of both. Almost all diagnoses can, in some circumstance, be disabling and render a person immediately community-dependent^{5 6}