mortality observed were attributable to differences in the quality of care at the intended place of delivery.

Firstly, although nulliparous and multigravid women were analysed separately, the authors did not analyse other characteristics that can be associated with differences in perinatal mortality. Dr Mark Charny's comment[2] cannot be dismissed on the grounds that "We compared a group of supposedly low risk deliveries with a group of mixed low and high risk deliveries." The point was that instead of a simple dichotomy there are many graduations of risk.

Secondly, and perhaps most importantly, antepartum fetal deaths were included in the analysis, even though, as Dr Gavin Young pointed out,[2] these are irrelevant to the question of the quality of care given at delivery.

We also question the validity of the statistical analysis presented to show differences in mortality among babies whose mothers booked at different types of units. Because of the relatively small numbers of births in the integrated unit, the expected number of deaths in this unit calculated in the χ^2 test for differences between the units was 4·0. With an expected value of less than five in one of the six cells, extreme caution should be used in drawing inferences on the basis of the test, and a "significant" value is certainly not a firm enough foundation for advocating major changes in policy. We cannot comment on the effect of adding in the 1988 data as the authors quote only the χ^2 value.

Even if it is accepted that there were significant differences in mortality overall the differences between consultant and isolated general practitioner units were no larger than would be expected by chance except among nulliparous women, and none of the comparisons in their first table[1] distinguished between antepartum and intrapartum deaths. This is important, as the crucial differences between death rates attributed to intrapartum asphyxia in consultant and isolated units is no greater than would be expected by chance.

Thus we consider that the authors' conclusion that "Both antenatal and intrapartum care were responsible for the higher perinatal mortality rate in the isolated general practitioner units" was not justified by their data. Of the studies that have compared similar groups of low risk women receiving maternity care supervised by general practitioners with those receiving it from consultant obstetricians, only one has shown the outcome to be poorer under the supervision of general practitioners.[4]

Bath district is almost unique in having such a high proportion of women delivering in isolated general practitioner units.[4] It is important to evaluate the consequences of the decision to retain them, but this paper is not a serious attempt to do so. We hope that funding will be available to enable the Bath district to install adequate information systems for its maternity services and do properly designed research, the findings from which have implications for how much choice women will have in the future about where and in what setting they give birth.

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AUTHOR'S REPLY,—Ms Rona Campbell and Ms Alison Macfarlane must realise that we used a χ^2 analysis only when we found a higher perinatal mortality in the isolated units: there was no hypothesis until then.

We did not assume that all differences in mortality were due to quality of care at the intended place of delivery, and we included antenatal deaths to fulfil a proper analysis. Should units absolve themselves of any responsibility for deaths not occurring within their walls? The management of pregnancy does not start in labour. We must examine all deaths if we are to improve perinatal care, and we are disappointed that Ms Campbell and Ms Macfarlane do not realise this.

We do accept that other factors such as social class are important. No factor, however, should so bias the result that a low risk group has even the same outcome as a mixed high and low risk group despite grades of risk within the groups. Either the isolated units were not delivering low risk patients as intended or their antenatal or intrapartum care could be improved.

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Early detection of gastric cancer

SIR,—Mr M T Hallissey and colleagues confirm that successful treatment of gastric carcinoma depends on its early diagnosis.[1] Diagnosis of carcinoma by barium meal examination and gastroscopy depend on the macroscopic appearance of the lesion, and in many cases the benign or malignant nature of the lesion cannot be determined. An established gastric cancer can be missed unless multiple biopsy specimens are taken, and premalignant lesions, being flat and indistinct, are more likely to be missed, even by endoscopy.[2]

Malignant transformation in cells is often accompanied by enzymatic changes that can be shown histochemically.[3] We have shown increased activities of β-glucuronidase in gastric aspirate from patients with gastric carcinoma.[4] Further observations on 177 patients presenting with dyspepsia (87 had carcinoma, 60 had duodenal ulcers, and 30 were normal) have clearly defined the role of β-glucuronidase activity in the early diagnosis of gastric carcinoma. We found considerably increased activity of β-glucuronidase in 78 patients with gastric carcinoma. In three of the seven patients with false positive results intestinal metaplasia was observed, a change that may represent a premalignant state.[5] Dyspeptic patients with positive test results for gastric juice enzymes but with no demonstrable carcinoma have histological changes associated with cancer in the gastric mucosa more commonly than do dyspeptic patients matched for age and sex with negative test results.[6] Patients with positive results are particularly at risk of developing gastric carcinoma and should be followed up.

Though enzyme tests are not recommended for screening asymptomatic populations, in areas with a high incidence of gastric carcinoma estimation of β-glucuronidase activity in resting gastric juice of dyspeptic patients over 40 may identify cases for further follow up.

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SIR,—Mr M T Hallissey and colleagues propose that every patient presenting with dyspepsia should undergo endoscopy.[1] This attitude is justified if all the gastric cancers detected have a good surgical prognosis, but in their study systematic endoscopy had a low rate of detection of gastric cancer and in only 19 cases were stage I or II cancers discovered.

It would be interesting to know, six years after the beginning of this study, if the survival rate of these patients was better than the usual rate for patients with this cancer. Treating the symptoms of the 2659 patients presenting with dyspepsia and performing a second endoscopy only in patients with persistent pain might have discovered a similar number of patients with early cancer but required fewer endoscopic examinations.

Mass screening is beneficial in Japan because superficial in situ tumours are common. But in Europe gastric adenocarcinomas are rarer[2] and begin to be symptomatic at a late stage, and curative surgery for this cancer is uncommon. Only a quarter of patients with dyspepsia complain of persistent discomfort[3]—that is, the same problems after 10 days' treatment of symptoms or any symptom still present after one month of medical treatment. Endoscopy might be performed in only this population with the same results for early detection of gastric cancer but at a much lower cost.

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HIV infection and foreign travel

SIR,—I am concerned that insufficient attention is being paid to the risks of acquiring HIV infection through heterosexual intercourse during foreign travel. Clearly, many of the public and at least a few medical practitioners have become sceptical of the risk associated with heterosexual activity, but at the end of August 1990, 52 people had contracted AIDS through heterosexual activity in the United Kingdom and 179 people had contracted the infection heterosexually while abroad.[1]

Despite the proliferation of information on the medical risks of travel the travelling public remains unaware of what is now overwhelmingly its greatest mortal risk. Over 100 Britons will now die each year of AIDS acquired while travelling compared with about 10 who will die of malaria and one of typhoid. Nevertheless, I suspect that most travellers expect (and receive) vaccinations and antimalarial drugs but no advice at all on HIV infection. The irony of this inverted priority is that HIV is the only infection related to travel that is infallibly preventable.

In a study from general practices in Nottinghamshire 17 of 354 overseas travellers had had sex with a stranger (S C Conway *et al*, sixth international conference on AIDS, San Francisco,