general practitioner unit or home including the risk of transfer. Nevertheless, she takes as her objective the comparison of the results of actual care by these alternative methods. That this objective, far from being 'more fundamental' as Tew claims, leads to absurd conclusions, may be illustrated by a hypothetical example.

Suppose that the perinatal mortality risk of home booking and delivery were 10% and the risk of hospital booking and delivery for the same group of women were 1%. Suppose further that the practitioners in charge of women booked at home were so good at diagnosis that they could predict the outcome of each home-booked pregnancy in time to transfer to hospital all the pregnancies that would have resulted in the death of the baby if the mother had remained at home. Then perinatal mortality would be zero at home, 100% for transfers, and 1% for mothers booked and delivered in hospital; and the chance of transfer would be 10%. Tew's method of analysis would identify home as the safer place of delivery, and recommend that all mothers should be booked there — with disastrous consequences.

Although this example has been deliberately exaggerated, it does show the nature of the bias caused by attributing the perinatal mortality of transfers to the hospital. General practitioners do not usually claim to be clairvoyant, but neither do they transfer patients at random. Madeley and Symonds give a practical example of this — the automatic transfer of intrauterine deaths — but the same argument applies where transfers are not certain to die, merely more likely. In short, because Tew's analysis is biased, her conclusions cannot be evaluated until the extent of the bias is determined.

In contrast, analysis by intention to treat is unlikely to cause bias, although it may reduce the apparent significance of any comparison. Although I do not have access to the raw data of the 1970 perinatal mortality survey, some indication of the outcome of analysing this survey by intention to treat may be derived from Table 1 in Tew's article and her 1984 paper.[1] The unstandardized relative risk of hospital was 5.15 (27.8/5.4) when comparing actual place of delivery, but 1.27 (22.9/18.0[1]) when comparing intended place of delivery. Standardization by antenatal prediction score reduces the first of these ratios to 4.38 (26.3/6.0), that is, by a factor of 1.18. If standardization were, for example, to reduce the relative risk between hospital and general practitioner unit or home bookings by the same factor, the standarized relative risk would become 1.08 — no longer significantly greater than 1.00. It might be further reduced if other risk factors known at booking were included. However, it seems unlikely that the relative risk of hospital booking will prove to be significantly less than 1.00.

If this conclusion could be confirmed by the raw data, it would in itself necessitate a reappraisal of the present policy of 100% hospitalization, which arose as a pragmatic response to falling birthrates in the 1960s and 1970s, and has never been properly evaluated. If home births do not carry an extra risk of perinatal death, then it is appropriate to consider other factors such as relative cost and maternal preference. In short, Tew need only have shown in unbiased fashion that a maternity policy that includes birth at home or in general practitioner units as an option is no less safe than hospital birth for all. The danger of her present paper is that, by claiming a superiority that she cannot substantiate, she will make the careful appraisal of such a maternity policy less likely.

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Reference

1. Tew M. Understanding intranatal care through mortality statistics. In: Zander L, Chamberlain G (eds). *Pregnancy care for the 1980s.* London: Royal Society of Medicine/MacMillan, 1984: 105-114.

Sir,

It must be obvious that I did not attempt to compare the relative safety of different methods of intranatal care merely by standardization. That is only one of the analytical techniques I have used and they all lead to the same conclusion.

Daphne Russell concedes the need for an inclusive score representing risks known at the time of booking, so that in comparing mortality rates selection biases may be allowed for. If the risk score is extended to cover events in pregnancy and early labour, as in the labour prediction score, transfer biases can also be allowed for. Most of the adverse experiences which lead to transfer are reflected in the labour prediction score. The number of births with higher scores becomes increased in hospital and decreased in general practitioner units and at home. Standardization is the appropriate technique for taking account of these changed proportions.

Russell does not give her reason for describing the labour prediction score as 'dubious'. Its limitations were discussed in the article, but reasons were given why the transfer of intrauterine deaths, the incidence of lethal congenital malformations, and the addition of other factors, whether or not associated with the included factors, would have explained little more of the excess mortality rate in hospital.

The most valuable use of the labour prediction score is, however, to make possible direct comparisons between groups of births having the same predicted risk at the point of delivery but different intranatal care. The process of allocating scores to births is completely unbiased, so my straightforward presentation of results must also be unbiased. Since at every level of predicted risk the mortality rate was higher in hospital, the unpredicted risk must have been higher under obstetric management. The specific pathologies where obstetric intervention may be life-saving cannot be distinguished in any labour prediction score; therefore, they must be few. In the majority of cases the outcome for transfers would have been better if, like others at the same overall risk, they had not been transferred. To attribute their high mortality to their place of booking grossly misrepresents the quality of intranatal care there and obstructs understanding of the conditions which really determine the safety of birth. If general practitioners had in fact been gifted enough to foresee the outcome, they would have advised few women to be delivered in hospital.

All the evidence from various sources considered in my analyses, published and unpublished, does indeed substantiate the finding that birth is less safe under obstetric management. But if the health authorities were to recognize that birth is not less safe at home or in a general practitioner unit, as Russell's calculations lead her to conclude, and revised maternity policy accordingly, that would constitute a major step in the right direction.

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MRCGP examination

Sir,

We write to support the ideas of Dr Oliver Samuel in his letter (September *Journal*, p. 445). We are members of a longstanding training practice and increasingly we find that trainees become preoccupied with the passing of the MRCGP in the last few months of the training year. Although we try to reassure them that continuing

with the routine work of general practice along with tutorials and wide reading will suffice, they are inevitably pressurized by membership courses, books and pamphlets (published to help pass the examination), plus the general air of concern among their fellow trainees.

It has taken some years to get vocational training generally recognized and the Joint Committee on Postgraduate Training for General Practice (JCPTGP) has laid down rules which in this region are applied fairly firmly. A trainee is not allowed to do less than one year in a training practice before becoming a principal, yet the pressure to study for and pass the examination tends to erode the last two or three months of the trainee year.

We appreciate the need for a certificate of satisfactory completion of vocational training which hopefully implies the attainment of a minimum standard, but would suggest that the College examination should not be taken until a minimum of six months to one year as a principal in general practice has been completed.

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Trainer/trainee workload

Sir,

As a trainer participating in their study, I was most interested to read the paper by N. Caine and colleagues (September *Journal,* pp. 419-422). It should be pointed out however, that most of the data were obtained in 1979 and this may affect the validity of the conclusions drawn.

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Part III — home, hotel or hospital?

Sir,

Having provided medical care for the majority of the residents of our local part III 'home' in Corsham, Wiltshire for 10 years, I have now carried out a survey of the physical, mental and social state of those living there at the beginning of this year. Fifty-three residents were assessed with an age range of 66 to 99 years. The average age of those entering the home is now 86 years.

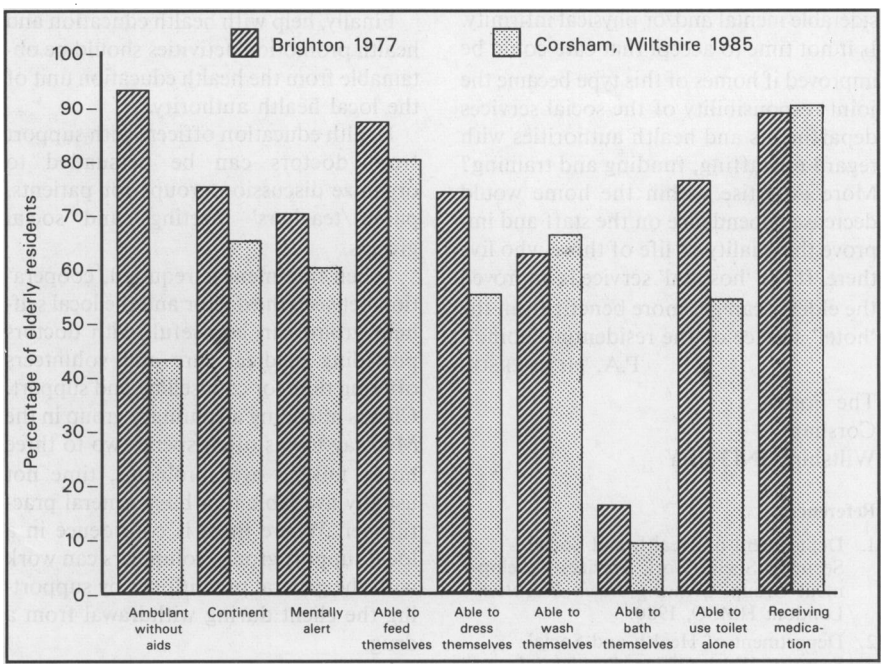

Figure 1. *The degree of dependence of elderly people in residential care (n = 53 for Corsham, Wiltshire).*

Forty-five different medical conditions were identified. The 10 most common were: arthritis (19), cardiac failure (12), senile confusion (11), defective vision (9), defective hearing (6), schizophrenia (5), depression (5), iron deficiency anaemia (5), hypertension (4) and vitamin B12 deficiency (4). In spite of a policy of regular review to reduce medication, 136 different oral drugs were being administered by the staff. The degree of dependence on the staff is shown in Figure 1 and the results of a similar survey carried out in Brighton in 1977 are also shown for comparison.[1]

Sixteen residents were mildly confused, 10 moderately so and five severely. This was a subjective assessment with no formal testing. The lack of both psychogeriatric beds and social services homes locally for the elderly mentally infirm means that our home must provide what help it can. It is no wonder that clear-headed residents find it distressing to live with those whose habits range from the mildly bizarre to the frankly disgusting.

The staff of part III homes are not required to have any health care training and few have had any formal training for the work. The work would not be undertaken by anyone who did not have a genuine caring attitude towards the elderly. However, the natural thing is for the staff to carry out tasks for partially disabled people rather than to encourage them to make the most of their residual faculties. When time is short and there are many tasks to be done, maximal help is the only answer in the short term, however counterproductive this may be in the long term.

With regard to transfer to hospital, our aim has been to apply the same criteria that would be used for a patient remaining at home if there was considerable family support. This includes terminal care if the last illness is not too prolonged. The Department of Health and Social Security guidelines for residential homes for the elderly[2] makes a distinction between professional health care and that which might be provided by a competent caring relative. If the former is required the health authority should provide it. If the latter is required, it is the responsibility of the social services department. But where is the dividing line? We know that unqualified people can learn complex skills — for example, the relative who gives home renal dialysis. The caring relative has to cope with only one patient suffering from a few conditions and taking a few drugs. The untrained staff at this home are expected to deal with over 50 residents with 45 different medical conditions and taking 136 different drugs. In addition they are expected to divide their time between the physical, mental and social needs of all in their care. Does this not suggest a need for professional expertise among the staff members rather than expecting them to call when necessary on the already overstretched domiciliary health care professionals?

As greater effort is made to keep the increasing elderly population in their homes, who are to be the part III home residents? It will be only those with con-