drug treatment with counselling, social work, or other psychological and social interventions. Good evidence from studies in psychiatric patients suggests that such psychosocial therapies combine well with drug treatment and are indicated for some psychological problems.⁸

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Measuring temperatures

SIR,—In his paper on using thermometers in general practice Steven Clarke shows the wide variation in the practice of temperature taking and identifies the problems associated with using the axillary temperature.¹ He and Duncan Keeley, in his editorial,² concentrate on the problem of detecting fever in children; another group in which measuring temperature may be difficult is elderly people.

We and colleagues have shown that the temperature of an afebrile elderly person varies according to the site of measurement.³ Simultaneously measured rectal and axillary temperatures differed by a mean of 0.91°C (95% confidence interval 0.87 to 0.95°C). Whereas a rectal temperature of 37.6°C was outside our normal range and signified fever, the equivalent figure for an axillary temperature was 37.1°C. The picture is further confused by our finding that the difference in the temperature measured in the auditory canal and sublingually was increased if patients with confusion, previous stroke, parkinsonism, and micrognathia or patients who were not wearing their dentures were included in the normal afebrile population. Mouth breathing, difficulties in maintaining the position of the thermometer, and the ambient temperature may influence the measurement.

The environment in a patient's home is different from that in a warm hospital ward. In unselected elderly patients the mean change in rectal temperature in the 24 hours after admission to hospital was 0.4°C.⁴ In our study 61% of patients who had a low or normal body temperature on admission had a raised temperature at one or more sites the next day.

The rectal temperature and temperature in the proximal auditory canal will detect fever in roughly 86% of febrile elderly patients, the sublingual temperature in 66%, and the axillary temperature in 32%.⁵ If important clinical decisions are to be based on a patient's temperature the limitations of the various methods of measurement must be understood. Keeley's advice to forget the axilla is

as important for elderly people as it is for the young.

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Ciprofloxacin in bacterial diarrhoea

SIR,—Y J Drabu and colleagues report on a patient infected with *Salmonella virchow* who displayed reduced susceptibility to ciprofloxacin after repeat dosing over 15 months.¹ The authors state, "Ciprofloxacin is not licensed for the treatment of bacterial diarrhoea." This is incorrect, as can be seen in the current datasheet, which indicates that ciprofloxacin may be used to treat enteric fever and infective diarrhoea. The datasheet also states that such organisms as *Salmonella* spp, *Campylobacter coli*, *C jejuni*, and *Escherichia coli* are fully sensitive to ciprofloxacin.

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Childhood mortality after a high dose of vitamin A

SIR,—Mike Lavender and Chris Vickery question whether vitamin A supplementation could be readily integrated into community health programmes, as colleagues and I suggested in our paper.^{1,2} I acknowledge differences between our programme and the basic health services found elsewhere in Nepal, which were necessitated by the requirements of rigorous documentation. I wish, however, to highlight elements in our programme's design that enhance the possibility of replicating it.

In the more than two years since our study vitamin A supplementation in Jumla has been carried out every four months by intermittent mass coverage of all children at central points in their communities—similar to patterns established by the existing expanded programme on immunisation. Coverage has remained high. This does not rely on the two weekly household visiting regimen of our pneumonia case management programme, which has been running concurrently but separately. Each worker does about 100 children a day and could easily do more in more densely populated areas. Such routine periodic contacts are certainly operationally feasible and contrast with the difficulties cited by Lavender and Vickery in sustaining routine house visiting programmes.

The fact that no other nutritional services were available to our population is an argument for the programme being able to be replicated. Many

primary health care programmes include elaborate components on nutrition education and growth monitoring, but, as Lavender and Vickery imply when they comment on the low levels of routine household contact with health personnel, such components are generally poorly executed. The programme we described has strength because it does not rely on this; we strongly disagree with Lavender and Vickery's claim that such an intervention should not be considered in the absence of a more comprehensive nutrition education programme, which adds great operational complexity. This is an appropriate long term goal, but first things first.

Our vital events monitoring system was entirely separate from the service delivery system, precisely to ensure that the intensity of monitoring would have no bearing on the delivery of services. The total cost of the programme per vitamin A dose delivered was under \$0.20; in most places such a cost is affordable.

The reduction in mortality of 26% in our study is modest compared with reductions found in other, less extreme settings. In Sarlahi, Nepal, the protective effect of periodic vitamin A supplementation was 30%, and in southern India weekly supplementation resulted in a 54% decline in mortality.^{3,4}

Our argument that this approach could be readily replicated does not imply that effort would not be required; our longstanding work with health services throughout Nepal and the proved effect on reducing deaths of children lead us to conclude, however, that this effort is feasible and worth while.

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Asthma in general practice

SIR,—Cedrick R Martys expresses disappointment at the inability of the Darley Dale asthma clinic¹ to show appreciable changes in morbidity compared with the Aylsham nurse run asthma clinic.^{2,3} Several fundamental differences between the two clinics are worth highlighting.

Our clinic was for patients who were already receiving prophylactic treatment. They were judged to have more severe disease and hence most to gain. The Darley Dale patients were selected on the basis of having asthma and would have included patients with fairly mild asthma and perhaps little to gain from an intensive asthma programme.

Our study was based on those patients who actually attended the clinic whereas the Darley Dale clinic was judged on the total population with asthma regardless of whether they attended the clinic. It seems unfair to judge a clinic by patients who did not attend, just as it is unrealistic to expect general practitioners to use the clinic protocol (which may take 45 minutes) in their 5-10 minute consultations.

Hilton et al and Jenkinson et al have shown that providing patients with knowledge does little to alter morbidity.^{4,5} Our behavioural approach, incorporating written self management plans, moves the control away from the doctor towards