

receiving the results stressful, even when the results were negative. Testing made them more anxious during their pregnancies than they had been during previous ones (even though one family had been in a Middle Eastern war zone during previous pregnancies).

Women need to be well informed before they consent to a potentially traumatic testing procedure.<sup>3</sup> The importance of counselling, however, resides in what the patient grasps, not in what the doctor thinks that he or she has communicated. In one large study 72% of counselled women knew that maternal blood is taken for the test but 33% were unaware that further tests are offered if the result is positive, 62% did not know that the test was for Down's syndrome, and 68% were unaware that most women with positive results have normal babies.<sup>4</sup> Can consent be truly informed in these circumstances?

The screening process is confusing and stressful. Whether any putative benefit outweighs the extra distress for 700 000 women each year is open to question.<sup>1</sup> Shouldn't our cardinal rule be first do no harm?

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- 1 Steer P. Recent advances in obstetrics. *BMJ* 1995;311:1209-12. (4 November.)
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### Author's reply

EDITOR,—The letter from Anne Kennard and colleagues published in a previous issue,<sup>1</sup> commenting on my review of serum screening for Down's syndrome,<sup>2</sup> shows perfectly some of the traps into which the enthusiasts for this technique fall.

Firstly, they say that it is inappropriate to quote the actual detection rate but insist on using the estimated rate, which is higher. Such estimates do not take into account women who refuse the test, book too late for it, or decide not to have amniocentesis despite having a high risk. As a realist, I quoted the actual detection rates.

Secondly, they say that serum screening can be introduced for £20 a test. As a clinical director who has introduced such a service in my own trust, I would like to know how a booking scan (essential for accurate dating), blood sampling, estimation of two or three serum markers, and (at least) 20 minutes' detailed counselling could be purchased for £20. I suspect that they are considering only the cost of measuring the serum markers, which is all that our purchasers originally offered to pay for when they asked us to introduce the test. We eventually convinced them that the extra scanner plus radiographer, phlebotomist, counselling time, and organising costs all had to be funded in addition.

Alex Bunn and colleagues emphasise the importance of counselling, which takes a lot of time. Time, especially in the new style NHS, is money. I too have witnessed much confusion about the principles of screening, not only among pregnant women but also among professionals, especially general practitioners. One general practitioner wrote in a maternity record: "screen negative (1 in 900), therefore reassured that she cannot have a baby with Down's syndrome." In addition, general practitioners often have difficulty understanding why screening policies vary among providers and purchasers. In their practice women

booked with one provider may be offered both serum and nuchal translucency screening whereas women booked with another may be offered neither.

Finally, in my review I accepted the possibility that screening might have reduced the incidence of Down's syndrome at birth. This, however, remains only a hypothesis, and many other possible explanations exist. The incidence of neural tube defects has fallen dramatically in the Republic of Ireland, where antenatal screening and termination are not widely practised. I am intrigued that Kennard and colleagues are so sure that they know what is cause and effect when many of the criteria for causality (as opposed to plausible association) are not yet met.

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Britain, and the years between ages 35 and 40 are the peak period for twin and higher order births, whether these are the outcome of assisted conception techniques or not. At age 37 the incidence of dizygotic (fraternal) twins is roughly four times that at age 20.

As for the fifth decade, in Britain around 9000 babies a year are born to mothers over 40. Many of these pregnancies are unplanned and might well not have occurred had it not been for some well intentioned but misguided doctor advising his or her patient that a woman of her age "needn't bother" with contraception any more.

The authors mention the Hutterite community in North America, but the research to which they refer is itself over 40 years old. A natural onset of infertility is by no means the only possible reason for the low number of births to women over 40, since there are, as the authors themselves suggest, a multitude of other possible explanations despite the Hutterite ban on contraception.

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- 1 Gosden R, Rutherford A. Delayed childbearing. *BMJ* 1995;311:1585-6. (16 December.)

## Topical acyclovir is beneficial in recurrent herpes labialis

EDITOR,—In his editorial on oral acyclovir in the management of recurrent herpes labialis Graham Worrall understates the evidence for the efficacy of topical acyclovir cream.<sup>1</sup> One of the principal benefits of topical 5% acyclovir cream in recurrent herpes labialis is that it terminates the condition at the prodromal stage<sup>2</sup> in addition to resulting in more rapid healing and less pain in those lesions that do develop.<sup>3</sup> Further evidence to support the ability of the cream to prevent the development of recurrent herpes labialis past the prodromal stage comes with the use of electronic infrared thermography as a reliable, non-invasive means of confirming the prodromal stage of the condition.<sup>4</sup> Preliminary results obtained with this method corroborate the earlier clinical observations: normalisation of the thermographic profile occurs when such early lesions are terminated at the prodromal stage by the cream.<sup>5</sup> It therefore seems appropriate to evaluate the true benefit of topical acyclovir in the treatment of recurrent herpes labialis before addressing the value of oral acyclovir.

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## Fertility continues after age 40

EDITOR,—The numerous women who have children in their fourth and fifth decades would hardly agree that "fertility declines at 30 and is almost gone by 40"—the alarming subtitle used by Roger Gosden and Anthony Rutherford in their otherwise reasonable editorial on delayed childbearing.<sup>1</sup> In 1994, 8451 sets of twins were born in

## Laboratories should use serum IgM tests to confirm measles

EDITOR,—We agree with Dereck R Tait and colleagues about the importance of laboratory confirmation of exanthems for surveillance purposes.<sup>1</sup> The salivary IgM assay has been used successfully during the recent measles and rubella vaccination campaign in selected districts<sup>2</sup> but is not yet available commercially. Serum measles IgM assays are now available, although in our experience the complement fixation test is still used widely for screening. A comparison of the methods has led us to believe that many cases of measles will be missed unless specific IgM assays are used more widely as a first line test.

During the 12 months November 1993 to October 1994 this laboratory received 608 serum samples from cases in which the clinical picture suggested possible measles. Screening with an IgM enzyme linked immunosorbent assay (ELISA; Sigma Diagnostics, St Louis, United States) yielded 50 positive results (age range 1-38 years). The positive samples were then tested by complement fixation, an alternative commercial ELISA (Biostat Diagnostics, Stockport, Cheshire), an in house immunofluorescence test, and radioimmunoassay. Forty nine of the 50 samples yielded positive results when the alternative commercial ELISA, in house immunofluorescence test, and radioimmunoassay were used, while one sample consistently gave negative results. In the complement fixation test, however, 46 of the 50 samples had titres of <160 (the accepted cut off value for performing an IgM test). A reduction in the cut off value was not realistic as 18 positive samples had titres of <20.

The complement fixation test performs best when acute and convalescent serum samples are being compared. While follow up specimens would have been requested for all the acute serum samples yielding negative results, only six were received (ages 6, 8, 13, 18, 18, 19); four showed a fourfold rise in antibody titre and two had stable titres of 20 and 80. Convalescent serum samples remain unusual, especially in children. Had we relied on the result of the complement fixation test alone (which in previous years was often obtained from a single serum sample), 80% of acute cases of measles would have been missed.

We have found both commercial and in house measles IgM tests to be reliable, and an IgM test is

now performed in all cases in which the diagnosis is suspected. Where measles remains endemic, laboratories should review their use of the complement fixation test for screening and use the serum IgM test to provide rapid results, at least until a salivary IgM test is more widely available.

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## Training in advanced trauma life support

### All aspects of life support should be part of undergraduate curriculum

EDITOR,—A J Price and G Hughes remind us of the inadequacy of training in resuscitating patients with trauma for senior house officers in Britain.<sup>1</sup> However, all aspects of resuscitation skills, including cardiac and paediatric life support, are sadly lacking. The authors' proposed solution—of increasing training in trauma life support for senior house officers in accident and emergency early in their career—is surely the wrong answer. Advanced life support skills should be a mandatory part of the undergraduate curriculum, with doctors graduating with not only an MB, BS (or equivalent) but also a certificate of competence in advanced life support.

At present many of these skills are taught during courses on paediatric, cardiac, and trauma life support. Doctors in accident and emergency, anaesthetics, and other acute specialties invariably attend each of these, often as late in their career as at senior registrar or consultant level. The content of these courses is similar in the initial stages—that is, demonstration and learning of basic life support techniques, manoeuvres to control an airway, and skills to ensure intravenous access and administration of drugs—with specialty components added and integrated according to the title of the course. The problem of recertification and confirmed maintenance of skills has been inadequately addressed.

If resources from departments of anaesthesia, accident and emergency medicine, general surgery, orthopaedics, paediatrics, cardiology, and general medicine were pooled it would surely be possible to ensure a course that was adequately taught and examined. Table 1 shows a possible timetable. Conceivably a body such as the Resuscitation Council could be commissioned to produce an appropriate curriculum and manual and a body such as the General Medical Council to oversee the examination standards. This course would result in undergraduates being competent in all aspects of resuscitation when they begin their preregistration

posts. It could also be extended to become a mandatory part of registration for overseas doctors, again ensuring common standards of emergency care.

Such a course would lead to better and more cost effective postgraduate training. The royal colleges or whoever oversees relevant specialty training would be able to devise one day refresher courses and assessment at intervals of three to five years as part of formal continuing medical training. Failure to pass this one day course would lead to postgraduate doctors having to fund a full refresher course themselves, which would ensure pressure to maintain skills at an adequate level.

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## Go on a course in the United States

EDITOR,—A J Price and G Hughes are right to criticise the difficulty that senior house officers encounter in obtaining training in advanced trauma life support.<sup>1</sup> We suggest that those doctors who have not been able to secure a place on one of the British courses should follow our example and take a course in the United States. There are more than 100 courses all over the country, and with almost no waiting list. A comprehensive list of courses can be obtained from the Committee on Trauma at the American College of Surgeons, 55 East Erie Street, Chicago, IL 60611-2797, USA. The cost of the course is about two thirds the cost of its British equivalent and should be reimbursed with consultant approval, but applicants will have to pay for their travel and accommodation.

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## Increased mortality related to asthma among asthmatic patients using major tranquilisers

### Underlying ill health is the main risk factor

EDITOR,—The paper by K S Joseph and colleagues seems to imply, in both its title and its conclusions, that there is a causal relation between taking major tranquilisers and death from asthma in asthmatic patients.<sup>1</sup> The results of their study do not support such a causal relation but do show an association. The authors recommend that physicians who treat asthmatic patients with a history of use of major tranquilisers should exercise greater caution over their management. This may be true, and the

authors give a convincing argument to support their case. In reality, however, if general practitioners (who treat most patients with asthma) were to use only the taking of major tranquilisers as a surrogate marker for potential death or near death they would probably miss many patients at risk.

Risk factors for death from asthma have been the focus of research, and much has been learnt from many studies, including those from Cardiff,<sup>2</sup> the west midlands and Merseyside,<sup>3</sup> and the asthma mortality task force,<sup>4</sup> and from a workshop in Denver, Colorado.<sup>5</sup> The report on the workshop is particularly helpful as it categorises the findings as factors in medical care, factors related to the patient, and high risk criteria in asthma. The high risk criteria in asthma include particularly adolescence and young adulthood, underlying severe disease, and previous severe attacks. Other risk factors include recent discharge from hospital, poor self care, non-compliance, depression or severe emotional disturbance, and psychosocial factors.

It is psychosocial factors that are often brought to the attention of the primary care team; they affect many more patients than just those who take major tranquilisers. Such factors include family dysfunction, bereavement, separation, alcohol or drug misuse, low social economic status, non-attendance at health care clinics, anger and conflict with doctors or health care workers, poor self care, unemployment, and geographical relocation leading to discontinuity of medical care. It is more important, therefore, that physicians should consider the underlying ill health—be it clinical, social, psychological, or psychiatric—and not its therapeutic management in identifying patients at risk of death from asthma.

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## Smoking may increase mortality when patients stop using tranquilisers

EDITOR,—K S Joseph and colleagues report an increased risk of death or near death in asthmatic patients who use major tranquilisers.<sup>1</sup> Their finding that subjects who had stopped taking major tranquilisers in the previous two months were at particularly high risk is intriguing. I am disappointed, however, that the authors do not give data on smoking patterns in the cases and the controls. It is well known that psychotic illness is associated with heavy smoking.<sup>2</sup> I wonder whether the findings would remain significant after adjustment for differences in smoking habit. It has been suggested that smoking helps schizophrenic patients to cope with psychotic symptoms<sup>3</sup> and that smoking improves cognitive deficits.<sup>4</sup> This raises the possibility that stopping major tranquilisers results in an increase in smoking. Cigarette smoking may therefore be the mechanism that mediates the increased mortality from asthma in those patients who stop using major tranquilisers.

From a practical point of view, in addition to optimising the management of asthma in schizophrenic patients it may be important to place emphasis on helping this vulnerable group of

Table 1—Possible timetable for training undergraduates in life support

	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	Introduction to basic life support	Practicals in gaining intravenous access	Practical cardiac scenarios	Practical trauma scenarios	Practical paediatric scenarios
Afternoon	Practicals in airway care	Lectures on theory of cardiac arrest	Lectures on theory of trauma	Lectures on theory of paediatric life support	Assessment and examination