reported that they had not been shown any form of clinical audit in general practice.

As for the half-day release courses, trainee satisfaction correlated with the degree of trainee participation in the course, the use of small group methods, and experience of Balint-type groups.

The impact of these findings was immediate and dramatic. The balloon of complacency was burst. Many of those responsible for training in the various regions looked with concern at the detailed regional analyses which were posted on the notice boards at the conference. In some regions, for example, more than a quarter of all trainees reported that they were sometimes left on call without back-up.

At the end of the meeting, the conference in plenary session took a number of notable decisions which are likely to influence vocational training in Britain in the years ahead.

First, it endorsed the general framework of the conference and expressed its appreciation of the high degree of trainee involvement and participation including several trainee chairmen.

Secondly, it decided to develop strong trainee representation in all the regions, so that the trainee voice would be heard more loudly in the future. It decided to break the previous pattern of triennial conferences and, in future, hold conferences at least annually. The Trent region was suggested as the venue for the next one in 1981.

Finally, the Conference was careful to avoid aligning itself either to the British Medical Association or the Royal College of General Practitioners, and moved cautiously towards an independent existence, whilst welcoming College support.

The meeting ended by recognizing the considerable personal triumph of the trainee conference chairman, Dr Clare Ronalds of Exeter, with a memorable standing ovation.

Assessment

The pleasant, good humoured discussions led to mature and productive proposals. Whilst the many defects of training were fairly faced, there were many occasions when the constraints facing vocational training organizations were recognized and the meeting understood that it too lived in a real world of limited resources. Participation was widespread. The substantial number of women trainees spoke up and spoke out. The social programme was imaginative and entertaining and included a dinner, barn dance, and barbecue, which added greatly to the enjoyment of the meeting.

This National Conference was largely designed by trainees for trainees; the three organizing committees consisted of 12 trainees, two ex-trainees, two senior lecturers from the Exeter Department of General Practice, and the Dean of Studies from the College, all with a trainee chairman. The outcome was a degree of involvement and participation not previously achieved in a national conference for vocational trainees, nor perhaps for trainees in any other medical discipline.

For historical reasons the evolution of trainee groups and trainee organizations has inevitably been slow and haphazard and has developed at different rates in different regions. Although some schemes have for years had strong and active trainee groups, others have had none at all and the trainee voice in some regions has been weak and ineffective. The achievement of this conference was the waking of the sleeping giant, the 3,000 doctors now training for entry into the largest branch of the medical profession.

This conference marked a watershed in the evolution of British vocational training, which may never be quite the same again. July 1980 may have marked the time when an era of benign paternalism, which had previously characterized vocational training, changed to an era of more abrasive but productive partnership.

From now on trainees can be expected to play an active part in the whole process of postgraduate training for general practice. Their presence as partners in committees and conferences will be greatly welcomed and will undoubtedly be a powerful pressure for improved standards in the future.

Screening for neural tube defects

OF all the seven ages of man, the first is surely the most emotive. The arrival of a new baby is almost always the happiest of events, but when that baby is born severely handicapped it becomes one of the greatest family tragedies. Anything that can lessen that possibility is of enormous importance.

When Brock and Sutcliffe (1972) reported a detectable rise in alpha-fetoprotein in the amniotic fluid of mothers bearing a child with a neural tube defect there was at last a hope that anencephaly, spina bifida, and related defects might be reliably detected, the birth of sufferers prevented, and a tragedy that affects about 2,000 families a year in England and Wales avoided.

During the subsequent eight years much further investigation has gone on and much debate has ensued about the desirability of establishing a national screening programme. It has become apparent that there are considerable technical and ethical problems. Amniocentesis is expensive, time-consuming and not without risk, and although this might be justifiable if a group of

high-risk mothers could be identified, unfortunately more than 90 per cent of affected babies are born to women with no previous history of the condition and no family history.

The measurement of the maternal serum alpha-fetoprotein has shown that a rise may indicate those for whom amniocentesis is justifiable (Brock *et al.*, 1973) but here other problems arise. The time at which this is done is critical and how certain can we be of the period of gestation? The risk of false positives and false negatives remains, so that a few mothers with a normal fetus will be aborted and a few affected babies will be missed and go to term. If screening were to be introduced as a routine procedure, as is done for rhesus incompatibility, what agony of mind would ensue for parents (and doctors) who had ethical objections to termination of pregnancy? All these matters are ones that vitally concern the family doctor, perhaps more than any other, who has to counsel and support families for many years.

In 1978 the Standing Medical Advisory Committee set up a Working Group (1979), under the chairmanship of Sir Douglas Black, to consider what advice should be given to health authorities on the introduction of a screening service into routine antenatal care, and that report has now been published. The review of scientific evidence was helped by the fact that the results of a screening service were available from three areas, Glasgow, Edinburgh and Bolton.

It is apparent that closed neural tube defects are not identifiable from the levels of alpha-fetoprotein in maternal serum but that, providing the tests are carried out of 16 to 18 weeks' gestation and multiple pregnancy is excluded, the sensitivity and specificity for open neural tube defects is high. Probably less than one in 10,000 normal pregnancies would be terminated and although these figures might be increased to three or four per 10,000 by losses following amniocentesis, there is evidence that some of these would have aborted anyway owing to the increased risk of spontaneous abortion where there is an affected fetus.

The report recommends to health authorities that mothers would be invited to choose whether they wish to be screened; that is, 'opting in' rather than 'opting out'. The problem of conscientious objection to termination would then be largely avoided but careful and informed counselling about the topic would need to be given to all mothers by their family doctors early in pregnancy. They would need to be told that the test is not foolproof but can pick up four out of five cases. The first positive serum test does not show involvement but only indicates the need for further investigation which would include ultrasound scan to determine the exact period of gestation and the absence of multiple pregnancy; if no other cause is found, the offer of amniocentesis would be made. The risk of fetal abnormality at this stage is still small but if the level of alpha-fetoprotein in the amniotic fluid is high there is a 99 per cent chance of an affected fetus; so termination would be offered. Up to two per cent of all pregnancies would require amniocentesis and the burden of this in terms of time and staff would be considerable.

If one had to take issue with the report it would be over the relatively small role that is envisaged for the general practitioner in the counselling procedure. A large part of antenatal care, including in most cases the all important first visit, falls to general practitioners. Patients who become confused and worried—and they often do—by the multiplicity of advice and the size and impersonal nature of some hospital maternity clinics, see their general practitioners for interpretation and solace. The technical problems may be great, but the emotional problems are at least as important; it is the family doctor who will mainly be responsible for helping parents to deal with them.

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The efficiency of general practice

PUBLICATIONS like *Health and Personal Social Services for England* (DHSS, 1977) make it possible to examine trends in the National Health Service in England for the years 1971 to 1976. These figures are particularly valuable, coming as they do from government departments.

Although the total population changed by less than one per cent, the number of people aged over 65, whom it is known account for a particularly large proportion of work, rose by half a million (eight per cent). To meet this increased demand, in addition to coping with new scientific developments in medical practice, the National Health Service increased its consultants by no less than 22 per cent, its hospital nurses by 21 per cent, but its unrestricted general practitioner principals by only six per cent.