quirements of their own. It might be to their advantage, therefore, if districts were to contact the Welsh Health Technical Services Organisation before embarking on the expensive and time consuming task of developing their own system locally. Those who already have working systems will no doubt be asked to add any missing items of the Körner steering group minimum data sets and to devise means for extracting these data for district or regional use. The complete child health system is one of the very few national systems that provide a comprehensive and flexible computerised programme for child surveillance and preventive care from birth to school leaving age.

COLIN H M WALKER

Consultant Paediatrician and Chairman, Child Health Computing Committee, Ninewells Hospital and Medical School Dundee DD1 9SY

## Can we still recommend meditation?

The enthusiasm of the 1960s for meditation as a "cure all" has mellowed. The passing of time and a large number of research studies now allow us to define the place of meditation with more certainty. The techniques advocated by different groups vary from the quiet sitting with a still mind to the whirling of the Sufi dervish, making definition difficult, but in a recent comprehensive review article<sup>1</sup> Shapiro defines meditation as "a family of techniques which have in common a conscious attempt to focus attention in a non-analytical way and an attempt not to dwell on discursive ruminating thought." It should be added that although Westerners undertake meditation in the hope of obtaining peace and tranquillity, religious devotees use it as a means of obtaining religious enlightenment.

The physiological effects of meditation include a reduction in respiratory rate, heart rate, blood pressure, muscle tone, and skin conductance. These changes form a pattern of decreased arousal.2 The electroencephalographic changes are consistent with this, as a slowing of the alpha, concurrent alpha and theta, and beta spindles are found during relaxation and on the borders of sleep.3 Thus there is no doubt that meditation relaxes, but it is not a unique form of relaxation, and several studies using other techniques of relaxation,4 muscular relaxation, or hypnosis have shown no difference between these and meditation. Most of these studies have been carried out on novice meditators and studies on experienced meditators might possibly yield different results.

Some evidence has been published suggesting that meditation may confer long term benefits on health. Meditators' heart rates and blood pressure have been found to respond more rapidly and recover more quickly than controls after seeing a stressful film, and a study of galvanic skin responses showed that long term meditators were less aroused than controls.<sup>5</sup> Published studies also suggest that beneficial changes in personality may occur. People who have practised meditation may be less anxious and less neurotic than they were before starting to meditate.<sup>6</sup> A recent study by Throll<sup>7</sup> confirms this, and suggests that meditation is more effective than relaxation techniques in effecting these changes on a

Early uncontrolled studies led to a very optimistic picture of the therapeutic effects of meditation but these results have not been confirmed. Several groups have compared the effects of meditation with relaxation techniques, hypnosis, biofeedback, and pseudomeditation in different populations of patients. Meditation is effective in treating anxiety, anxiety and alcoholism, alcoholism, mild hypertension, and insomnia, but in most studies it is no more effective than the control techniques. One or two studies did find it to be superior. Difficulties in matching other techniques with meditation and time spent at the task could account for this effect, however, and future studies must be adequately controlled. 1 6 At present there are indications that meditation is an effective form of treatment but not necessarily better than more orthodox regimens. If patients who suffer from stress related disorders are motivated to learn and practise meditation they may be expected to do well. In some studies, however, the dropout rate has been high and those starting meditation have tended to be the more neurotic and anxious patients.

What then are the contraindications to this form of treatment? Borderline or frankly psychotic people should be excluded as should those with a history of psychosis who are still receiving drug treatment, as meditation may terminate a remission. 168 Prolonged periods of meditation have occasionally been shown to lead to psychotic episodes, acute anxiety, depression, and suicide, and prolonged meditation should be undertaken only in groups where there is adequate care and knowledge of the likely effects. Those who find the process produces negative results should not be pressed to continue, since their symptoms tend to get worse with time. One final group who may run into trouble are patients with epilepsy whose seizures are intensified by the reduction in the level of alertness which occurs during the meditation session.9

To whom should a patient be referred to learn the techniques of meditation? Medical practitioners are clearly unwilling to let their patients be taken over by any likely guru down the road who raises unrealistic expectations. They are best referred to a well established group and preferably one which does not charge and has a good system of supervision and aftercare. The technique chosen should be one with which the patient feels comfortable—for example, mantra meditation (sitting still) or hatha yoga (body exercises) and so on. Alternatively "clinically standardised meditation" (CSM) may be learnt from tapes. 10 If support from a peer group is thought to be important then the transcendental meditation movement could be considered, although the patient should be warned about the pressure on initiates to attend "advanced" classes.

PETER FENWICK

Senior Lecturer and Consultant Psychiatrist, Maudsley Hospital, London SE5 8AZ

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