of the family.[9] Specific skills are required from general practitioners, a variety of hospital specialists, nurses, social workers, school and hospital teachers, and staff in other disciplines. Inevitably there will be areas of overlap in what each group legitimately regards as its territory; without effective communication and coordination the family members may well find themselves overburdened by too many people interfering in some aspects of their lives while in other critical areas they are left unsupported. This is particularly true of school, a most important aspect of the lives of both patients and siblings that has received insufficient attention in the past.

The prognosis for childhood malignancies has improved to a remarkable degree, but the impact of the diagnosis still resembles a sort of death sentence—death to life as it was for the affected family. The challenge to us as professionals remains, as before, to provide the sustenance that will help the family to survive this threat to its integrity. The psychodynamic theorists have done much to illuminate how we all have to learn to cope with necessary losses in our growth towards maturity,[10-13] but the ordinary props of family life may well prove insufficient when families are faced with such an extreme challenge. Skilled professional support can help to cushion the impact and to sustain and nurture family members through this crisis in their lives, enabling them to emerge tempered but not fractured by the fire of the experience.

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Teaching medical students about alcohol

Could be integrated throughout the curriculum, but first the attitudes of teachers must change

Despite the evidence that alcohol misuse damages health many doctors still seem unwilling to take a drinking history and feel unable to help patients change their damaging drinking habits.[1 2] "There seems to be an unspoken assumption that physicians should only concern themselves with the diseases caused by alcohol misuse" rather than the drinking itself.[3] Several factors account for this reluctance, including lack of knowledge, embarrassment, and pessimism about the possibility of changing entrenched habits. Not least, however, may be the doctor's own drinking habits and attitude towards alcohol. Many of these attitudes were formed at medical school, and, as discussed at a recent meeting run by the Royal College of Physicians of Edinburgh and the Medical Council on Alcoholism, may in turn affect the way that today's students are being taught about alcohol.[4]

On average, medical schools devote only about 14 hours of teaching to alcohol and drug misuse.[5] More disturbingly, medical training seems to have a negative effect on attitudes towards alcohol abuse, students becoming less sympathetic and concerned during the years of clinical training. This may be due partly to the negative attitudes of senior clinical teachers towards patients with alcohol problems. Several medical students attending the meeting commented on their teachers' lack of interest in drinking histories they had taken and on their general dismissiveness towards patients with alcohol problems. There is ample evidence that these patients are unpopular with doctors in all specialties, including psychiatry.[6 7] Non-psychiatrists still tend to view alcohol problems as principally the concern of psychiatrists, which may have the effect of marginalising their importance in general medical education. Thus training in alcohol and drug misuse is not seen as part of the core curriculum and attempts to improve the training meet obstacles in the negative attitudes of those who have the power to influence the curriculum.

If alcohol problems are to receive prominence in the training of doctors then more research is needed into methods of educating both undergraduates and, as importantly, their teachers. Favoured approaches include video practice, small group tutorials, and practical clinical experience, preferably over an extended period with selected patients. Medical students should also be encouraged to increase their awareness about their own drinking habits and acknowledge the difficulty they have in changing them. In this way the distinction between the patient and the carer would become blurred, improving students' insight into the difficulties patients have with alcohol problems. At a time of increasing technological development in medicine undergraduate training must not neglect the development of communication and counselling skills. Helping people to change habits associated with unhealthy lifestyles has become important in all medical practice.

At the meeting it was suggested that each medical school should make a designated teacher responsible for developing integrated teaching about alcohol and other forms of substance misuse within the curriculum and for monitoring the impact of these changes. Other suggestions were to find ways of providing continuity of education between undergraduate and postgraduate training and to liaise closely with non-medical disciplines to reinforce training in a team approach to alcohol misuse.

We know that the medical curriculum is overcrowded and faces competing demands for time. The profile of alcohol and substance misuse could, however, be raised without making inroads into other clinical topics simply by ensuring that its importance was emphasised at every opportune stage in the undergraduate experience.[8] The World Health Organisation has recently examined ways in which this subject might be integrated into the medical curriculum and has provided guidelines for teaching.[9] The health consequences of alcohol misuse are protean. Hence there will never be any difficulty in obtaining enough clinical examples to underscore the importance of asking about alcohol as part of taking a medical history.

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Who should take vitamin supplements?

Healthy people eating a healthy diet do not need them

In 1988 a multivitamin and multimineral supplement was reported to improve the performance in non-verbal intelligence tests of 30 schoolchildren in Wrexham in an eight month double blind trial. Though the authors warned that their study needed to be repeated, for the media it was big news. The story broke on television two days before the article was published in the *Lancet*.[1] The British nutrition establishment found many weaknesses in the trial,[2-9] and two attempts to confirm the results failed.[10 11] Yet the public continues to believe in vitamins: one such persistent belief is that vitamin C will prevent colds, despite a meta-analysis of 27 controlled trials having shown that vitamin C has no worthwhile effect.[12] So is any benefit to be expected for ordinary people from vitamin supplements?

Expert committees do not think so—at least for the populations of affluent countries. The American Institute of Nutrition and Society for Clinical Nutrition recommends that "healthy children and adults should obtain adequate nutrient intakes from dietary sources. Meeting nutrient needs by choosing a variety of foods in moderation, rather than by supplementation, reduces the potential risk for both nutrient deficiencies and nutrient excesses. Individual recommendations regarding supplements and diets should come from physicians and registered dietitians."[13] The United States National Research Council could find "no documented reports that daily multiple vitamin-mineral supplements, equalling no more than the recommended dietary allowances . . . are either beneficial or harmful for the general population."[14] Dismissive recommendations like this are incomplete unless they give guidance on the outlines of an adequate diet—for example, "people eating a good diet that includes bread and cereals, vegetables and fruit, meat or meat substitutes and dairy products do not require vitamin and mineral supplements."[15] The consensus is clear: "healthy adult men and healthy non-pregnant, non-lactating women consuming a normal varied diet do not need vitamin supplements."[16]

Three things may go wrong when people choose to treat themselves with vitamin preparations. Firstly, people eating a good diet are more likely to take supplements regularly than those at risk of nutrient deficiency.[17 18] Secondly, the vitamins people choose to take are often not the ones inadequate in their diet.[19] Thirdly, the preparations available do not make it clear whether the doses of vitamin they contain are near the nutrient requirement or many times greater. Toxic effects are now well established for megadoses of water soluble pyridoxine (vitamin B-6),[20] as well as for fat soluble vitamins A and D. In summary, all too often the wrong people are taking the wrong doses of the wrong vitamins.[21]

On the other hand, when well fed people take vitamins in nutritional doses and not megadoses they can do no harm. The medical interest in vitamins should perhaps concentrate on the indications for supplements in groups of people at risk of deficiency. Newborn infants need vitamin K. In pregnancy the most critical nutrients are folic acid, iron, and calcium. The same three nutrients may be needed in lactation, and the suckling infant's intake from breast milk of most vitamins can be increased if the mother takes supplements. Vitamin D may be needed in winter by children in the north of Britain and by anyone who is housebound. Vegans, and especially their infants, require vitamin B-12 supplements. Alcoholics should receive supplements of thiamine. Then for various conditions a multivitamin supplement may be indicated: people with low calorie intake, those taking weight reducing diets or with poor appetites, and the elderly and frail, food faddists, the emotionally disturbed, and socially disadvantaged people.

It is, however, difficult to find a good multivitamin. The ideal preparation would provide the recommended daily amount[22] or recommended dietary allowance[23] of all 13 vitamins[24] and none of the non-vitamins, as in the Australian product Elevit. There is no such preparation in the *British National Formulary*. Those listed contain mostly from four to seven vitamins, never more than 10, and rarely include folic acid. The doses and their ratios vary inexplicably. Thiamine, for example (requirement 1·0 mg per day) ranges from 0·5 to 5·0 mg per tablet or capsule.

Lastly, some hypotheses are now being tested for prophylactic use of vitamins beyond preventing clinical or subclinical malnutrition. A definitive answer is awaited from the trial studying the use of vitamins at the start of pregnancy to reduce the risk of neural tube defect in babies born to women who have previously had an affected baby.[25 26] Another general hypothesis with wide implications is that one of the "antioxidant" vitamins, vitamin A, β carotene (or even a non-provitamin A carotenoid), vitamin C, or vitamin E may confer some protection against the development of some types of cancer.[27] None of the present evidence is more than suggestive. Prevention trials have started and we may expect others to be set up.

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