human erythropoietin is being used include the anaemia of premature, myelodysplastic syndromes, and anaemia associated with HIV infection. It has also been used to increase the number of units of blood harvested for autologous transfusion. These results are still preliminary.

Molecular biologists have provided a dazzling new array of recombinant growth factors of which recombinant human erythropoietin is one. The unlimited availability (apart from cost considerations) should permit the treatment of patients with anaemia in new and exciting ways either with growth factor monotherapy or with suitable combinations of recombinant growth factors.

HENRY HAMBLEY
Locum Consultant Haematologist

GHUJAM M UMITI
Senior Lecturer

Department of Haematological Medicine,
King's College Hospital, London SE5 9RS

14 Issac NN. The role of erythropoietin in regulation of population size and cell cycling of early and late erythroid precursors in mouse bone marrow. Cell Tissue Kinet 1977;10:323-44.

Patients’ reactions to illness

Cognitive factors determine responses and are amenable to treatment

People differ widely in their emotional responses to physical illness. Persistent emotional disturbance is more common in those with a history of psychiatric illness or with inadequate social supports. Whether or not a patient becomes depressed or anxious is only weakly associated, if at all, with the severity of the illness or of the physical symptoms. What seems to matter most are the sufferer’s cognitions: attitudes to and thoughts and beliefs about the illness.

Emotional disturbance is particularly associated with dysfunctional cognitions—that is, beliefs that do not serve an adaptive purpose and are given exaggerated emphasis or may even be false. For example, a man who believed that his myocardial infarct had resulted from his straining to pass urine was anxious and unable to return to his previous life because he felt unable to close the door whenever he was using the lavatory. Terminal illness does not necessarily prevent a person from settling his or her affairs or from getting advice as before through being with family and friends. Yet some patients who are terminally ill develop the dysfunctional belief that all happiness will henceforth totally elude them. If this belief results in their withdrawing from social intercourse it becomes self fulfilling. Emotional disturbance is not inevitably linked with dysfunctional cognitions, however, and similarly not all abnormal beliefs are dysfunctional. For example, a man who was undergoing haemodialysis long term had worked out a plan to commit suicide if his circumstances became intolerable. Despite continuing suicidal thoughts he coped adequately with his illness. He became severely depressed when he discovered that he could not bring himself to end his life. Undue optimism may help some patients with cancer, and excessive denial may also be adaptive in some circumstances.

Such clinical observations are well supported by evidence from research. For example, the degree of pain and disability in arthritis are more closely associated with cognitive variables than with the duration or severity of the illness. Patients with low back pain who are also depressed have more distorted perceptions of the impact of their back pain than their non-depressed peers. Patients with a variety of illnesses who believe that their symptoms might become uncontrollable are more likely to be depressed or anxious, regardless of their physical state. In a recent study of outpatients in a dermatology clinic Wessely and Lewis found that psychiatric morbidity was independent of the skin condition, or duration of the skin disease but related to attitudes towards appearance and to the behavioural impact of the skin disorder.

Dysfunctional or not, cognitions are usually unspoken, beyond normal awareness, and taken as axiomatic. Dysfunctional beliefs about illness commonly reflect lay or idiosyncratic theories of disease, which may be difficult for doctors to recognise or expect and so need to be elicited actively. Learning to identify and to modify dysfunctional cognitions are core elements of cognitive therapy. This is well established as being effective for depression and is being applied to a growing range of diseases. Its efficacy has been shown in managing chronic pain and in reducing the psychiatric morbidity associated with cancer as well as the disability caused by asthma and chronic obstructive airways disease.
Some types of cognitive therapy—such as those used in managing personality disorders and in conditions traditionally seen as suitable for psychoanalytic treatment—are time consuming and require considerable experience and skill. By contrast, in cases of anxiety, depression, and physical illness cognitive therapy is characteristically brief and focused. It not only addresses current cognitions but also teaches the patient how to deal with these more successfully in the future. Thus, cognitive therapy should have a prophylactic effect, and there is already some evidence that it does. And if cognitive techniques may be successfully acquired by patients they must also be accessible to general practitioners, physicians, and other specialists. They are described in treatment manuals, and they offer considerable scope for improving communication between doctors and their patients.

Cognitive therapy initially developed empirically from clinical observation. One of the main strengths of the cognitive model, however, is its support and enhancement by experimental research. This convergence of clinical and experimental data is shown well in a recently published handbook of cognitive therapy. Reliable data of this kind allow therapists to determine the particular cognitive factors associated with defined types of illness and so to develop specific interventions. Several studies that are testing such interventions are in progress. Their success, and the ease with which they can be applied by clinicians who are not specialists in cognitive therapy, will define more clearly the role of cognitive interventions in physical illness.

TOM SENSKY
Senior Lecturer in Psychiatry
Charing Cross and Westminster Medical School,
West Middlesex University Hospital,
Ikeworth,
Middlesex TW7 6AF


36 Blackburn IM, Emson KM, Bishop S. A two year naturalistic follow up of depressed patients treated with cognitive therapy, pharmacotherapy and a combination of both. J Affective Disord 1986;8:67-75.

Juniors’ hours of work

eightysomething is too long

The BMA and the government both agree that junior hospital doctors should work no longer than 72 hours a week. Yet the most recent figures show them contracted for a weekly average of 82 hours. Given the rare agreement between doctors and the government over such a fundamental condition of service why does such a wide gap persist?

Concentrating on the size of the gap obscures the progress that has been made regarding juniors’ hours in recent years. One in one rotae have been outlawed and attempts made to eliminate, firstly, one in two rotae and then rotae more onerous than one in three. Together, these initiatives have brought down the average number of hours worked each week from the upper 80s a decade ago. But government circulars and intermittently functioning district working parties are clearly not enough: a survey by regional health authorities showed that last September 22% of doctors had more onerous rotae than one in three. And despite the exhortations from the Department of Health going back to 1982 many one in two rotae remain.

So what can be done? Three separate solutions could each reduce contracted hours at a stroke. Firstly, the government could turn its long term aim of a 72 hour a week maximum into legislation, and the National Health Service and Community Care Bill, currently before parliament, would seem the ideal vehicle for this. Legislation on shorter hours might have been expected to follow a statement in the government’s Self-Governing Hospitals: An Initial Guide that self governing hospitals would be expected “to comply with the Government policy relating to the number of hours for which junior doctors may be employed.” In its current state, however, the