statement referring to James Mackenzie's work 'But, along with his contemporaries, he appears to have been unaware of the heart condition which is the commonest cause of death today, coronary thrombosis or myocardial infarction — almost certainly because it was virtually non-existent then.'

Mackenzie described many cases of myocardial infarction which he saw as a general practitioner in Burnley. Not only does Mackenzie provide beautiful case descriptions in his book *Diseases of the heart*[1] but he often sent the hearts of the deceased to Arthur Keith, a distinguished morbid histologist in London; Keith's reports leave no doubt about the diagnosis.[2]

In his book *Angina pectoris*, Mackenzie was able to record the ages at which 284 patients died where the death was 'due directly to the condition which caused the angina.'[3] He was also able to say that 'On going over my notes I find records of the 380 patients who had consulted me for attacks of angina pectoris. I have no doubt a great many have died whom I have not been able to trace.' This suggests a personal experience of at least 380 cases and probably many more.

I have recently become aware that Edward Jenner was also familiar with ischaemic heart disease in the latter half of the 18th century.[4] In a letter to Heberden he states '...in the course of my practice I have seen many fall victim to this dreadful disease [angina pectoris], yet I have only had two opportunities of an examination after death. In the first of these I found no material disease of the heart except that the coronary artery appeared thickened.'

We have ample evidence that Mackenzie was familiar with ischaemic heart disease and that the disease he saw so commonly in general practice is the same as that seen today. The only thing he did not do was use the terms coronary heart disease, myocardial infarction or coronary thrombosis. We owe it to Mackenzie that he should not be misrepresented.

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Stress and doctors

Sir,

I am writing to applaud the views put forward by Dr Styles in his editorial (February *Journal*, p.46) on stress in undergraduate medical education.

The points raised have some bearing on the research into the heartsink phenomenon[1] which I have been pursuing with Dr Tom O'Dowd. We have found that younger general practitioners are more likely to integrate their own stress and tiredness into a definition of the term heartsink than would older, more experienced general practitioners. They are also more willing to acknowledge that their failures and fears are of relevance to the problem of heartsink. They are also more amenable to discussing the problem openly and are less likely to regard the term as pejorative.

Past studies have identified the role of humiliation and shame in medical education,[2,3] and the reticence of doctors to accept and talk about personal stress.[4,5] This has led some commentators to dismiss the medical model as inappropriate for primary care.[6,7] The rejection of such a model is unfair to new practitioners because it is their shield and is essential for their clinical survival. I feel that Dr Styles is arguing that it is the system in which the model exists, and not the model itself, that restricts successful communication.

The infiltration of the term heartsink into general practice terminology should be taken as an indication that the issues being faced by young practitioners were not adequately addressed during their student days. It is still common for the heartsink feelings of a student or young doctor to be interpreted as a sign of timidity. All of us involved in the education of both medical undergraduates and postgraduates should examine our own attitudes and consider whether we perpetuate the issues Dr Styles discussed so admirably.

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Hypoglycaemia and human insulin

Sir,

Widespread concern among a group of diabetic patients who have been changed from using an animal insulin to human insulin has been reported in the national media. These patients have described an altered reaction to impending hypoglycaemia, characterized as diminished warning or loss of warning.

The British Diabetic Association has set up a task force to investigate this and to advise on ways of helping those patients who are worried. Two major studies have been financed to help gather evidence but to date no clear association between hypoglycaemic warnings and the type of insulin has been identified. However, the British Diabetic Association has collected a large number of reports from individuals with diabetes and their carers. These highlight the serious problems which many people face with regard to hypoglycaemia, regardless of the type of insulin they use.

It has long been the advice of the task force, the British Diabetic Association and many professionals that patients who wish to should be allowed to change back to animal insulin. It is regrettable that despite this advice the British Diabetic Association is still receiving letters from patients stating that their doctor will not help them to change back to animal insulin.

The scientific basis for advocating a change back to animal insulin has yet to be proved, but respecting the autonomy of patients and working with them to provide the best care demands that we listen to these requests. I would ask general practitioners to remember this recommendation and help patients who find themselves in this position.

One of the reasons which makes the use of animal insulins less acceptable is the unavailability of animal insulin in cartridges for use in pen devices. The British Diabetic Association is currently trying to achieve a change in policy by the manufacturers so that patients' choice of insulin will not be handicapped by such technicalities.

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