Starvation in hospital

Ethically indefensible and expensive

EDITOR,—John Garrow is right to emphasise the neglect of nutrition in medical practice.¹ The provision of a simple nutritional supplement to patients with hip fracture significantly lowers complications and deaths and reduces the length of stay in hospital from a median of 40 to 24 days.² Poor vitamin C status is associated with the development of pressure sores,³ which prolong the stay in hospital. Even in fit elderly people modest supplementation of vitamins and trace elements significantly reduces the number of days of infectious illness.⁴ Not only is nutritional neglect ethically indefensible but better nutrition will save the NHS money: it has been estimated that improved nutrition for hospital inpatients would alone save the NHS £266m a year.⁵

Nutrition influences every specialty inside and outside the hospital. We already have the nutritional skill of dietitians to call on. For doctors trained in both nutrition and medicine, such as myself, there are no positions within the rigid specialisation of medicine; such doctors have to try to rely on research grants. Much research on nutrition, however, is unappealing to pharmaceutical companies and does not carry the kudos of molecular biology. It is hard not to be tempted by the United States, where clinical nutrition is a specialty in its own right.

ALISON AVENELL
Research registrar

Department of Clinical Biochemistry,
Aberdeen Royal Hospitals Trust,
Aberdeen AB9 2ZD

- 1 Garrow J. Starvation in hospital. *BMJ* 1994;308:934. (9 April.)
- 2 Delmi M, Rapin C-H, Bengoa J-M, Delmas PD, Vasey H, Bonjour J-P. Dietary supplementation in elderly patients with fractured neck of the femur. *Lancet* 1990;335:1013-6.
- 3 Goode HF, Burns E, Walker BE. Vitamin C depletion and pressure sores in elderly patients with femoral neck fracture. *BMJ* 1992;305:925-7.
- 4 Chandra RK. Effect of vitamin and trace-element supplementation on immune responses and infection in elderly subjects. *Lancet* 1992;340:1124-7.
- 5 Lennard-Jones JE. *A positive approach to nutrition as treatment*. London: King's Fund, 1992.

Screen patients on admission

EDITOR,—Janet P McWhirter and Christopher R Pennington discuss the incidence and recognition of malnutrition in hospital.¹ At Seacroft Hospital, Leeds, an audit of nutrition in 1992 yielded similar findings and resulted in measures being taken to improve the recognition of malnutrition.

In March 1992 all patients in the medical unit (n=85) were assessed by a senior dietitian, who used a combination of objective measurements and clinical judgment to determine their nutritional status. The number of patients referred to the dietetic service for nutritional support was noted, and medical notes were reviewed for information about nutritional state. Fifty one (60%) patients were found to be at risk of malnutrition. Only 22 had nutritional indicators documented in their medical notes, and only 29 (57%) of the malnourished patients had been referred for nutritional support.

In view of these findings a series of educational sessions on nutrition was introduced for medical and nursing staff and a simple nutrition screening questionnaire was developed to be completed

Letters should be no more than 400 words long, should contain a maximum of five references including one to the *BMJ* article to which they refer, and must be typed with double spacing. All authors need to sign the letter and provide their current appointment and address. Please enclose a stamped addressed envelope if you require an acknowledgment. First reports of original research are not published in the letters section.

by nursing staff for each patient on admission. Measurements of body mass index, recent weight history, and current dietary intake had to be noted. On the basis of the questionnaire patients may be referred to the dietetic service for further assessment.

The audit was repeated in January 1994 (n=121). Fifty eight (48%) patients were found to be at risk of malnutrition. Sixty six had nutritional indicators documented, and the proportion of malnourished patients referred for nutritional support had risen considerably (44 (76%)). Obviously, we would like to see a referral rate of 100% and have further work to do. Nevertheless, increasing nursing and medical staff's awareness of nutritional problems and introducing a screening protocol to identify patients at risk of malnutrition have increased the number of patients benefiting from nutritional intervention. I recommend this procedure to other units.

LYNN GEORGE
Senior dietitian

Medical Unit,
Seacroft Hospital,
Leeds LS14 6UH

- 1 McWhirter JP, Pennington CR. Incidence and recognition of malnutrition in hospital. *BMJ* 1994;308:945-8. (9 April.)

Malnutrition goes unnoticed before surgery

EDITOR,—Janet P McWhirter and Christopher R Pennington found that, of 200 undernourished patients, only 47 (24%) had had their weight, and 31 (16%) their height, recorded before admission.¹ Even this may be an underestimate of the problem. In the larger sample of surgical patients who were index cases in the 1990 confidential inquiry into perioperative deaths and were drawn from many hospitals around Britain only 222 of 2220 (10%) had their height recorded preoperatively and 1710 of 2234 (77%) had their weight recorded.² Thus even if all the patients who had their weight recorded also had their height recorded, body mass index could have been calculated for at most 10% of patients.

A good case can be made for correction of malnutrition before surgery.³ In the confidential inquiry, however, only 20 of 2680 (0.7%) had received any nutritional support preoperatively. As the incidence of malnutrition in surgical patients has been estimated at up to 50%,³ this confirms that malnutrition is virtually unrecognised before surgery. This supportive evidence from a large and detailed inquiry reinforces

the need for increased awareness of nutritional status.

The message is not new: greater awareness has been called for since the 1970s.⁴ Perhaps the time has now come for action. Perioperative nutrition needs to be given for at least 10 days to affect the outcome in severely malnourished patients.⁵ For patients having planned surgery this issue should be addressed not only on admission but also in the outpatient clinic. We believe that determining patients' body mass index during the outpatient consultation should cue simple dietary advice for those who are mildly undernourished (body mass index <20). Prompt referral to a dietitian is indicated for severely malnourished patients (body mass index <18).

SIOBHAN MILLER
Senior dietitian

Department of Nutrition and Dietetics,
Barnsley District General NHS Trust,
Barnsley

J M MILLER
Senior registrar in public health medicine

Department of Public Health,
Trent Regional Health Authority,
Sheffield S10 3TH

- 1 McWhirter JP, Pennington CR. Incidence and recognition of malnutrition in hospital. *BMJ* 1994;308:945-8. (9 April.)
- 2 Capling EA, et al. Report of the national confidential enquiry into perioperative deaths 1990.
- 3 Lennard-Jones JE. *A positive approach to nutrition as treatment*. London: King's Fund Centre 1992.
- 4 Hill GL, Blackett RL, Pickford I, Burkinshaw L, Young GA, Warren JV, et al. Malnutrition in surgical patients: an unrecognised problem. *Lancet* 1977;ii:689-92.
- 5 Heys SD, Park KG, Garlick PJ, Eremin O. Nutrition and malignant disease: implications for surgical practice. *Br J Surg* 1992;79:614-23.

Refer early to a dietitian

EDITOR,—John Garrow's editorial on starvation in hospital¹ prompts us to share our experiences of assessing psychiatric inpatients. The dietitian in our unit found that, by the time clients had been referred for advice on low body weight, anorexia, wound healing, or specific problems of malnutrition, intervention was both personally intrusive and expensive. With the aid of the unit's quality assurance coordinator, we surveyed a group of clients to assess whether their weight and body mass index were within the normal range. The findings showed that a method of early referral and advice on nutrition was needed. To this end, and with the help of ward staff, who would be required to use the tool devised, a score sheet to assess risk was formulated together with an education programme for nurses.

To test our assessment tool an audit project was carried out. Of the 117 clients assessed, 53 were identified as being at risk. Only three of these had been referred for dietary advice. Lack of referral was highlighted by Janet P McWhirter and Christopher R Pennington in their paper.² After nutritional intervention the scores of 32 clients in the project improved or stabilised.

The role of a dietitian has been described as "to give nutritional support, whether in sickness or in health."³ A report by the King's Fund pointed out the necessity for nutritional care and education of staff and said that an assessment of "a client's nutritional status [should] become mandatory in the nursing and medical notes."⁴

We hope that psychiatric and clinical medicine will soon establish the need for assessment of nutrition and encourage teamwork to those ends,