dences of colorectal cancer in the world.⁴ We suspect that this altered site distribution may also occur in other areas of the British Isles where there is a high rate of colorectal cancer in the population.

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- 1 Jones DJ, Irving MH. Investigation of colorectal disorders. *BMJ* 1992;304:974-7. (11 April.)
- 2 Rhodes JB, Holmes FF, Clark GM. Changing distribution of primary cancers in the large bowel. *JAMA* 1977;238:1641-3.
- 3 Jass J. Subsite distribution and incidence of colorectal cancer in New Zealand, 1974-83. *Dis Colon Rectum* 1991;34:56-9.
- 4 Kee F, Patterson CC, Collins BJ. Incidence and site distribution of colorectal cancer in Northern Ireland. *Ulster Med J* 1990;59:155-60.

Immunisation, not vaccination

SIR,—“Immunisation” is now the word of choice to refer to the stimulation of immunity by deliberate intervention without causing the disease in question. “Vaccination” means the stimulation of immunity to smallpox by inoculation of live vaccinia virus. Vaccination is no longer carried out because smallpox has been eradicated. It is now commonly used loosely to refer to any immunisation. The terms immunisation and vaccination are often used together (presumably for emphasis) or interchangeably. They can even be found in the same sentence in respectable journals.¹

The Health Education Authority uses the terms immune, immunise, immunity, and immunisation and completely avoids using vaccination and vaccinate. The only instance in which the authority has found itself unable to avoid using a word derived from “vaccinia” is the term vaccine because no other suitable short word seems to exist. This policy avoids potentially confusing messages being received by people who have no reason to know that these days immunisation and vaccination are likely to mean the same thing. Please would everybody else do the same?

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- 1 White JM, Gillam SJ, Begg NT, Farrington CP. Vaccine coverage: recent trends and future prospects. *BMJ* 1992;304:682-4. (14 March.)

Electrical stimulation of the spinal cord in peripheral vascular disease

SIR,—For several good reasons there is currently considerable interest in debating and determining the place of surgery—particularly major amputation—in the treatment of peripheral arterial disease. Jack Collin, interestingly, dissects the question of critical limb ischaemia and amputation from that of claudication, failure to treat claudication being said to result only in persistence of the symptoms.¹ I wonder how valid pathophysiologically this division is. Might not the pain of claudication be seen as the first indication of critical tissue ischaemia? If this was so and there was an adequate treatment at that early stage to improve the peripheral circulation then it might not simply relieve pain but also protect from future deterioration.

Electrical stimulation of the spinal cord has been

known to relieve the symptoms of peripheral vascular disease for more than 20 years² and to affect the peripheral circulation in the legs for more than 10 years.³ It has been associated with a reduction in the amputation rates from 90% to 38% in comparable groups⁴ and of proved value in clinical series on the continent.⁵ It presumably gets no mention in Collin's editorial as it has evolved from neuroscientific and pain relieving specialties. It is available in several neurosurgical units and being used to treat symptoms of peripheral vascular disease. Although the equipment costs £4500, the technique is essentially non-destructive and its overall price is comparable with that of the alternative of amputation or vascular reconstruction. It certainly deserves mention.

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- 1 Collin J. Avoiding amputation. *BMJ* 1992;304:856-7. (4 April.)
- 2 Cook AW, Weinstein SP. Chronic dorsal column stimulation in multiple sclerosis. Preliminary report. *NY State J Med* 1973;73:2868-72.
- 3 Tallis RC, Illis LS, Sedgwick EM, Hardwidge C, Kennedy K. The effect of spinal cord stimulation upon peripheral blood flow in patients with chronic neurological disease. *International Rehabilitation Medicine* 1982;5:4-9.
- 4 Augustinsson LE, Holm J, Carlsson CA, Fall M. Epidural electrical stimulation in severe ischaemia. Evidence of pain relief, increased blood flow and a possible limb-saving effect. *Ann Surg* 1985;202:104-11.
- 5 Tallis R, Jacobs M, Miles JB. Spinal cord stimulation in peripheral vascular disease. *Br J Neurosurg* 1992;6:101-5.

Home based and hospital care for severe mental illness

SIR,—Clinicians and their managers will be eager to see how applicable M Muijen and colleagues' study of home based care for patients with severe mental illness will be to their own districts.¹

The main determinants of admission to hospital apart from the severity of the disturbance are the contribution of family or friends to care, the sort of home that the patient has, and the capacity of community services. It would be of great value to have some of these items of information for the experimental and control groups both to check further their comparability and so that we can know how they compare with those for other populations. The number and type of sections is a good crude index of all these factors, and it would help to have this information as well. Can I assume that the social services were consulted before patients were taken off a section, and did they object at all in individual cases? Are the day centres that are mentioned comparable to day hospitals?

I made a point survey of the acute services at my own hospital on 25 March. Of the 31 patients, 25 had been admitted on a section, only five had been living with family or friends, 11 lived in their own home but alone, three lived in hostels, four lived in bed and breakfast accommodation, and eight had been sleeping rough. Are these the sort of patients who were seen in Muijen and colleagues' study? Although clinicians would see maintaining patients in the community as good in itself, managers would want to know whether the overall figures for the occupancy of district beds fell during the study.

My district and many other districts in North East Thames region are desperately short of beds. Our managers will no doubt quote this study and suggest that we could manage with fewer beds. It is vital to have fuller information before we can say that they are right or wrong.

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- 1 Muijen M, Marks I, Connolly J, Audini B. Home based care and standard hospital care for patients with severe mental illness: a randomised controlled trial. *BMJ* 1992;304:749-54. (21 March.)

SIR,—M Muijen and colleagues' report, by showing that home based care offers some advantages over hospital based care for patients with severe mental illness, has the potential to influence the deployment of health resources away from inpatient psychiatric care.¹ However, the case for psychiatric admission for patients with psychotic illness, whether or not under the provisions of the Mental Health Act, often relates to the possibility of violence—that is, to suicidal attempts and harm to others. One would expect the assessment of this (which relatively rarely leads to loss of life) to form an important part of the assessment of the case for or against hospital based care.

Muijen and colleagues state that no suicides occurred during the follow up period of their study, but they give no information on suicide attempts and note that one patient cared for at home was charged with homicide. Although it is reassuring to read that “A hospital inquiry cleared the daily living programme from any blame,” I must ask whether in this case the homicidal act was related to psychotic phenomena and whether, had the patient not been allocated to the home care group, he would have been admitted to hospital. If the answer to either of these questions is yes then this outcome (a rare event) ought to form part of Muijen and colleagues' conclusions.

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AUTHORS' REPLY,—O W Hill and T J Crow raise valid points. Community services in our deprived inner London catchment area were minimal. Comparison of the severity of our and Hill's patients requires more direct measures of psychopathology and daily function than are available. His figures of 80% of patients having been admitted on a section and a quarter living rough are high. Of our 187 patients, 27% began the study subject to a section, many had been expelled from their families, and some were sleeping rough. Our community (daily living programme) team's availability sometimes obviated the need for a section. Our team's social worker and her colleagues were consulted when patients were taken off their section, and there were no objections. The decreased length of stay in district beds would have allowed closure of 10 beds for as long as community care similar to the daily living programme continued.

Most patients having home based care had a brief inpatient spell, usually at the outset, and some repeatedly. We did not strive to prevent admissions at all costs but rather to keep them as brief as possible and to maintain continuity of care by making the daily living programme team responsible for the inpatient phase too. That responsibility was a key factor, as later papers will show. Out of 92 patients randomised to the daily living programme, two could not be managed even with inpatient phases and had to be transferred to long term inpatient care.

In the 18 months after entry to the trial three deaths from self harm occurred in the group receiving home based care and two in the control group (details to appear in our final report). Many studies have noted a high death rate in psychotic patients, and there is no easy way to reduce this. The risk remains high despite intensive inpatient or community care, or both. Suicides occur surprisingly commonly even among patients on a section and under 24 hour special observation by nurses.

The homicide by a patient cared for at home