in response to hormone deficiency and replacement. This is shown by our longitudinal data and those of others.³

The menopause is the most important factor in determining bone loss at the femoral neck.⁴ Like Dr Selby and colleagues we do not know whether minor effects seen in cortical bone in the forearm or metacarpal have any relevance to the femoral neck. Their misquotation of a study of osteoporotic women⁵ in which no significant effect of calcium on cortical area was found does not add weight to their argument. Nor does Dr Gillespie's misinterpretation of our table II, where negative percentage change values represent bone loss.

There are certain times during life when extra calcium intake is required physiologically. These include growth, pregnancy, and lactation; but not the postmenopause.

JOHN C STEVENSON

Cavendish Clinic,
London NW8 9SQ

MALCOLM I WHITEHEAD

Academic Department of Gynaecology,
King's College School of Medicine,
London SE5 8RX

- 1 Sandler RB, Slemenda CW, LaPorte RE, et al. Postmenopausal bone density and milk consumption in childhood and adolescence. *Am J Clin Nutr* 1985;42:270-4.
- 2 Lees B, Devenport M, Simpson R, Stevenson JC. Relation of physical and lifestyle factors to vertebral and femoral neck bone density in premenopausal women. In: Christiansen C, Johansen JS, Riis BJ, eds. *Osteoporosis 1987*. Viborg: Norhaven, 1987:392-3.
- 3 Riggs BL, Wahner HW, Melton LJ, Richelson LS, Judd HL, O'Fallon WM. Dietary calcium intake and rates of bone loss in women. *J Clin Invest* 1987;80:979-82.
- 4 Stevenson JC, Lees B, Cust MP, Ganger KF. Does aging or menopause determine proximal femoral bone density? *Journal of Bone Mineral Research* 1988;3:66.
- 5 Nordin BEC, Horsman A, Crilly RG, Marshall DH, Simpson M. Treatment of spinal osteoporosis in postmenopausal women. *Br Med J* 1980;280:451-4.

Treating renal calculi

The study by Mr Nicholas Mays and others (23 July, p 253) of extracorporeal shock wave lithotripsy and percutaneous nephrolithotomy showed that stone free rates were greater after percutaneous nephrolithotomy than after lithotripsy, and that success and side effects after lithotripsy were related to stone bulk.

Percutaneous nephrolithotomy can provide stone free rates in excess of 90%,^{1,2} and lithotripsy can produce stone free rates of about 70%.² The failure to persuade urologists to perform a randomised trial of the two techniques has been highlighted previously by the authors.³ It is most unlikely that the two groups of patients in the present study had comparable stones. The point that decisions for one treatment or the other might have been made freely should be treated with some scepticism because both are not equally available to an NHS patient.

The demands for lithotripsy are large, and waiting lists are long. In Newcastle only patients with difficult staghorn stones receive treatment with lithotripsy. The stones are "debunked" by percutaneous nephrolithotomy, and the patient travels the country with a nephrostomy tube in position. Most of our remaining patients with stones that will need treatment within the next year or so, who are often relatively straightforward cases, undergo percutaneous nephrolithotomy. We suspect that the same is true elsewhere. We had not thought previously of making a virtue out of the necessity for our treatment policy.

The authors rightly indicate that the outcome after operation is measured not only by stone free rates. The cost and relative misery engendered by treatment also need to be taken into account. Most patients are rendered stone free by lithotripsy alone, and even in the present study most patients with single stones were stone free after treatment.

Newer lithotripters may be used without an anaesthetic on a day case basis. Thus, most simple stones can be treated without discomfort or any invasive treatment: that is the achievement of extracorporeal shock wave lithotripsy. Satisfactory stone management requires ready access to both lithotripsy and percutaneous nephrolithotomy.

D E NEAL
P D RAMSDEN
P H POWELL

Departments of Surgery and Urology,
Freeman Hospital,
Newcastle upon Tyne NE7 7DN

- 1 Segura JW, Patterson DE, LeRoy AJ, et al. Percutaneous removal of kidney stones: review of 1000 cases. *J Urol* 1985;134:1077-81.
- 2 Lingeman JE, Coury TA, Newman DM, et al. Comparison of results and morbidity of percutaneous nephrostolithotomy and extracorporeal lithotripsy. *J Urol* 1987;138:485-90.
- 3 Challah S, Mays NB. The randomised controlled trial in the evaluation of new technology. *Br Med J* 1986;292:877-9.

Failure of suicide prevention measures at Risley

Dr Richard Smith (9 July, p 89) discussed the visit by the prison inspectorate to Risley Remand Centre and the failure of suicide prevention there. It seems unsatisfactory that no assessment of suicide risk was made and no precautions were taken to identify or treat people who would try to commit suicide.

I was worried, however, about the emphasis that was put on filling in forms.

At Bedford prison an assessment of the suicide risk of each inmate is made by the reception officer, then by the hospital officer, and finally by the doctor. A stamp is used which designates each inmate as having no detectable suicide risk, a low suicide risk, or a high suicide risk. The emphasis is on forming relationships with the prisoners and encouraging them to talk about their problems. Emphasis is also put on the need for any officer to speak personally to the doctor or hospital officer on duty. Any prisoner who has been designated a low suicide risk is put with cellmates who will keep an eye on him. People who are high suicide risks are admitted immediately to the prison hospital, counselled, and treated for their depression. The means of committing suicide are removed from them.

Following the visit to Risley more formal forms are being introduced in Bedford. I have considerable anxiety about this, as I feel that officers will be more likely to think that having filled in the form they have fulfilled their duty. At the moment it is emphasised that the officer's relationship with the patient and his duty to inform the prison hospital and medical officer are of paramount importance.

There is no evidence in the United Kingdom or America, where a similar form of suicide prevention is practised, that carrying out this procedure has any effect on the rate of suicide. I believe that teaching prison officers the skills of caring and counselling is more important than getting them to fill in forms.

E MARTIN

Bedford Prison,
Bedford

Mentally abnormal prisoners on remand

I agree with Ms Judy Weleminsky (16 July, p 199) that there is an urgent need for the provision of remand centres for people under arrest who are thought to need a psychiatric assessment. We have a tradition in England and Wales that medical

assessments before trials are carried out in prison property by prison medical officers and their associates.

In June 1986 the House of Commons Social Services Committee reported on the prison medical service and made 58 recommendations.¹ Recommendation 22 urged that all psychiatric reports in prisons should be carried out by qualified psychiatrists, and recommendation 25 asked the government to reconsider urgently the number of planned places in regional secure units. In its reply the government said that "the long experience of practical forensic psychiatry which a number of prison medical officers are able to call upon when assessing a prisoner for a report to court is, it is believed, valued by the judiciary" and "the experience of the Regional Secure Unit Programme in its now substantially developed form is not so much that more Regional Secure Unit places are needed . . . but that the approach to secure provision has to be further diversified."²

Even backbench members of parliament believe that the provision for mentally abnormal offenders is adequate. In an adjournment debate Mrs Gillian Shepherd quoted the social services committee as suggesting that 1500 male prisoners with mental disorder are currently housed in our prisons but then went on to say, "the admission criteria and the local cooperation and coordination between all the relevant agencies . . . are more important than the number of places available" and "More important than providing yet more money for special hospitals is the minimising of delays for those awaiting transfer from prison, and that means speeding up the provision of reports."³ She concluded that courts may be unfamiliar with the remand provisions of the Mental Health Act and that doctors are reluctant to accept remand prisoners.

Unfortunately, the remand provisions in the new Mental Health Act were doomed to be a disappointment because the act was introduced without the resources to support the proposals and, indeed, directed resources away from patient care.^{4,5} The slow progress that is being made with regional secure units was documented recently.⁷

There is insufficient accommodation in regional secure units. My own special health authority has had to close eight of its 30 secure beds because of problems with funding. Closures of mental hospitals are gathering momentum. Most mentally abnormal offenders need psychiatric care for 5-10 years, some of that in hospital and much of it in the community. Sheltered accommodation with appropriate staffing is in short supply. A quart will not go into a pint pot, no matter how many exhortations are made.

JOHN GUNN

Institute of Psychiatry,
London SE5 8AF

- 1 House of Commons Social Services Committee. *Prison medical service*. London: HMSO, 1986.
- 2 Home Secretary. *Reply to the third report from the social services committee*. Prison medical service. London: HMSO, 1987.
- 3 Shepherd G. Adjournment debate. *House of Commons Official Report (Hansard)* 1988 July 13;137:cols 526-32. (No 187.)
- 4 Gunn J. The law and the mentally abnormal offender in England and Wales. *Int J Law Psychiatry* 1979;2:199-214.
- 5 Gunn J. Reform of mental health legislation. *Br Med J* 1981;283:1487-8.
- 6 Gunn J. Mental health act (1983): progress or vitiation? *J R Soc Med* 1984;77:96.
- 7 Snowden P. Regional secure units: arriving but under threat. *Br Med J* 1987;294:1310-1.

Dr Jeremy W Coid's evaluation of the fate of mentally disordered prisoners (25 June, p 1779) relies on data that were collected retrospectively. He concludes that one in five mentally disordered offenders on remand were denied appropriate treatment by the catchment area consultant psychiatrist on unreasonable grounds and that those prisoners who were rejected were generally those most in need of care.

The sample of disturbed prisoners and their

needs were established using hospital records and court reports. The definitive diagnoses were based on the opinions of the prison doctors rather than those of the consultant psychiatrists. Rejection of an offender was defined as any occasion when the prison doctor recommended treatment but the consultant disagreed. In many cases this entailed dispute over the diagnosis or the most appropriate method of managing the problem. Unfortunately, the limitations of the design of the study make it impossible to judge accurately which of the two conflicting opinions was more valid and whether the consultants' decisions to "reject" the prisoners were unreasonable.

Prison medical officers have not usually received such extensive training in the diagnosis and management of mental illness as consultant psychiatrists. Prison doctors work under considerable pressure as a growing population of mentally disordered prisoners are referred to them.¹ In these circumstances disagreements might be expected, particularly as the requirements for compulsory admission of mentally disordered prisoners under section 37 of the Mental Health Act (1983) differ from the requirements for, say, admission for treatment under section 3 in that no review by an approved social worker occurs, and it could be argued that the criteria may be less stringent. Consultant psychiatrists may be wary of using such powers without strong evidence of potential benefit.

Stronger evidence is needed to assert reliably that consultant psychiatrists are biasing their recommendations to suit the inadequacies of a failing psychiatric service. Such evidence may be gained from a prospective study employing impartial doctors to assess the offenders.

NAOMI A FINEBERG

Academic Department of Psychiatry,
St Mary's Hospital, London W2 1NY

1 Bluglass R. Mentally disordered prisoners: reports but no improvements. *Br Med J* 1988;296:1757-8.

Delayed communication between hospitals and general practitioners

In a study of 100 consecutive admissions from my practice of 1750 patients, where there is a hybrid system for delivering discharge communications by hand, post, and health board van, 66% of discharge letters were received within three days of the patient's discharge, with a positively skewed distribution and a mean delay of 4.3 days as found by Dr T M Penney (2 July, p 28).

These results seem to be better than those achieved with the hand delivery system which Dr Penney reports. I found that the mean delay for discharge summaries was 16.8 days, which is also an improvement on his figure of 25.3 days. Summaries were received for 99% of admissions. The distribution was again positively skewed. Prompt delivery of the preliminary discharge letters is essential, as my study has shown that 66% of patients contact their general practitioner before he receives the summary. Patients in Lothian are given three days' supply of recommended drugs, but only half of their discharge letters arrive within three days, confirming the continuing need for improvement. Telephone communication is often used in Lothian, and telephone calls were received in all 13 cases of death in my study. Efficiency of communication is not uniform throughout Britain,^{1,2} and before we accept, as has been suggested,³ that discharge letters are most efficiently delivered by hand there should perhaps be a study of those cases where drugs are recommended, to confirm an improvement on the above figures.

Since the advent of vocational training for general practice all general practice principals have approved hospital experience, but the converse does not operate yet for hospital specialists. They may never have experienced general practice and may give little thought to the effects of poor communication on patients no longer under their immediate care. It has been suggested that all potential specialists should have primary care experience and that to be able to understand primary care is a prerequisite for good secondary care.^{4,5} Perhaps there is a case for the addition of yet another subject to the undergraduate curriculum—business management—with particular emphasis on the application of modern communication technology to medicine.

JAMES F FAIR

Edinburgh EH10 4RP

- 1 Mageean RJ. Study of discharge communications from hospital. *Br Med J* 1986;293:1283-4.
- 2 Harding J. Study of discharge communications from hospital doctors to an inner London general practice. *J R Coll Gen Pract* 1987;37:494-5.
- 3 Dover SB, Lowe-Beer TS. The initial discharge note: send out with the patient or post? *Health Topics* 1984;16:48.
- 4 Hopcroft K. Stop the bias in medical students' education. *General Practitioner* 1988 Jan:49.
- 5 Norwell N. In at the deep end. *GMSC News Review* 1988 May:8.

Management of abdominal aortic aneurysm

In answer to the question about the incidence of rupture of abdominal aortic aneurysms in the community raised by Mr R A P Scott and others (18 June, p 1709) we have recently carried out a survey in the Swindon health district. The district comprises a population of about 250 000 people, and in the six years from January 1982 to December 1987 we identified 197 patients with a ruptured aortic aneurysm. Most were men aged 65-80 years, with a mean age of 73.9 years (range 54-94), and the ratio of men to women was 5:1. Of the 197 patients, 135 (69%) reached hospital alive, 88 (45%) were operated on, and only 28 (14%) survived. This represents an operative mortality of 68% and an overall community mortality of 86%. In 20 (15%) patients reaching hospital alive rupture was not diagnosed until necropsy, physicians and surgeons being equally responsible with 10 patients each. During the same time 60 elective repairs of aneurysms were performed with a mortality of only 3.5%. Over the six years the incidence of aortic rupture almost doubled from 20 (8/100 000 population) in 1982 to 38 (15/100 000) in 1987, but with no change in the overall mortality. In contrast, the number of elective repairs undertaken did not change at all, with 11 cases in 1982 and 10 in 1987.

As the incidence of abdominal aortic aneurysm continues to increase¹ doctors at all grades must become more aware of their possible presence and complications because discovering an aneurysm and not referring the patient² is as bad as not diagnosing it in the first place. Even improving the operative mortality of patients with ruptures makes little difference to the overall community mortality. We wholeheartedly agree with Mr Scott and others that if any inroad is to be made into improving the appalling community mortality from ruptured aortic aneurysms a community screening programme should be introduced to detect aneurysms before they rupture. Any patients found to have such an aneurysm could then be referred for either close follow up (those <4.5 cm) or elective repair (>4.5 cm), which has an infinitely superior mortality. As most aortic aneurysms occur in men a cost effective screening programme should currently be limited to men, probably those aged 65-75. Surely in this era when large screening programmes rightly exist for breast and cervical cancer men deserve their own

screening programme to detect the curable, but otherwise lethal, abdominal aortic aneurysm?

J S BUDD

Department of Surgery,
Leicester Royal Infirmary,
Leicester LE2 7LX

D R FINCH

Princess Margaret Hospital,
Swindon,
Wiltshire SN1 4JU

- 1 Ingoldby CJH, Wujanto R, Mitchell JE. Impact of vascular surgery on community mortality from ruptured aortic aneurysms. *Br J Surg* 1986;73:551-3.
- 2 Allen PIM, Tudway D, Goldman M. Can we improve community mortality from ruptured aortic aneurysm? *Br J Surg* 1987;74:332.

Uptake of immunisation

Professor Brian Jarman and others (25 June, p 1775) revealed an interesting but weak association between uptake of immunisation and social deprivation. Perhaps a stronger association might be manifest if the heterogeneity of district health authorities' populations was recognised.

In Liverpool, a district of relative deprivation and traditionally having a low immunisation uptake, there has been considerable internal variation in uptake between areas (figure). The rates in inner

Percentage of children in Liverpool born in 1982 who had completed courses of diphtheria immunisation on 31 December 1984

city areas (A) have been considerably lower than in the district's most affluent area (I). We need to use postcode data from child health computer systems to study such associations more closely within and between district health authorities. Additional data, such as size of families, can be added to the analysis. Surveys on parents' attitudes will also be essential to complement other data.

Most district health authorities are organising their immunisation programmes more tightly, and if efforts at public education and professional training are successful we may find that the association between uptake and deprivation is even weaker. It is premature to suggest allocating resources to improve immunisation rates weighted by deprivation until we have better data and have tried other, more simple, approaches which may prove to be more cost effective.

A debate is needed about the choice and use of meaningful indicators of health at local level within district health authority and family practitioner committee boundaries. The improvements expected in the 1991 census and the interrogation of family practitioner committee and district health