About 100 general practitioners on the research register of the Royal College of General Practitioners have agreed to take part in a larger study, which it is hoped will confirm these findings. This investigation is about to start, and documents to record data are being distributed.

More participants will be welcome. May I, through these columns, ask interested general practitioners to write to me for further information.—I am, etc.,

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¹ Blair, R. A., Gilmore, J. S., Playfair, H. R., Tisdall, M. W., and O'Shea, C., *Journal of the Royal College of General Practitioners*, 1970, 19, 22.

Insulin and Oral Therapy in Diabetes

SIR,—We were interested in the paper by Drs. A. M. Tomkins and A. Bloom (11 March, p. 649). Our own experience at the Diabetic Clinic, Kingston, Jamaica, suggests that insulin therapy too may be needed less often than is generally realized.

One hundred consecutive diabetic patients (average duration of disease 2.7 years) were given an intensive course of re-education in the principles of dietary control. Obese patients (that is, those over 110% of ideal weight), who numbered 51, were usually put on an 800-calorie diet initially. Once proper carbohydrate restriction was practised (usually for the first time in the diabetic's life), only 7% of patients needed insulin for satisfactory control (as adjudged by a two-hour postprandial blood glucose of under 170 mg/100 ml and regular sugar-free urine tests). This compares with Dr. Bloom's figure of 26% among United Kingdom patients.¹

Of course, it may be that the patterns of diabetes in the United Kingdom and in Jamaica differ markedly. We would ask that a physician who sees an apparently insulin-dependent West Indian diabetic for the first time should bear in mind the possibility that the patient might be controlled without need for insulin. This is sometimes practicable even when the diabetic is young, thin, and initially ketotic.—We are, etc.,

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D. G. DELVIN

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¹ Bloom, A., *Postgraduate Medical Journal*, 1969, 45 (Suppl. May, p. 5)

Care of the Mentally Handicapped

SIR,—Dr. A. Kushlick (11 March, p. 686) unfortunately appears to have misunderstood my letter (29 January, p. 308). Far from regarding improvements of living conditions and provisional facilities in hospitals as "unnecessary luxuries," I have attempted to draw attention to unacceptable living conditions for patients, and to inadequate facilities in hospitals. I have tried, however, to make the point that in comparing the quality of different forms of care no valid comparison is possible unless the cost of providing it is the same.

The purpose of my letter was to sound a warning note about the way this policy was being implemented, leaving aside the

fact that I consider that the Department of Health and Social Security has committed itself to the provision of community care on inadequate data. If the hospitals are going to be run down, and all improvement in the quality of services in hospitals stopped before adequate alternative provisions are made (which appears to be the case at present), then the hospitals will not be able to meet their commitments to the community they serve, and the present hospital population is going to be condemned to continue living under unacceptable conditions. However exciting and acceptable this prospect may be to people planning services at a distance, they cannot but fail to frustrate and dismay clinicians who will have the continuing duty of caring for their patients.—I am, etc.,

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Cyclophosphamide and Pigmentation

SIR,—Alopecia and acute haemorrhagic cystitis are well recognized side effects of cyclophosphamide, but we would like to draw attention to a case in which pigmentation occurred in the nails and teeth.

A 3-year-old boy was admitted on 11 April 1971 with a six-day history of generalized oedema. A diagnosis of the nephrotic syndrome was made. Initially he was treated with prednisone, but he became severely hypertensive with a blood pressure of 180/145 mm Hg and developed a spontaneous femoral artery occlusion in the left leg just above the knee, which was successfully treated with anticoagulants. Five days later he was started on a six-week course of methylodopa 125 mg t.d.s., and in order to cover the urgent need to reduce the steroids, cyclophosphamide was given in a dosage of 80 mg/day, starting on 1 May. This produced alopecia, and had to be discontinued after one month due to the development of acute haemorrhagic cystitis; but a satisfactory remission was induced.

On 10 May it was noticed that a brown discolouration had developed at the base of the finger and toe nails (Fig.), and there was a brown line on the teeth at the junction with the gums. The changes in the teeth have persisted but those in the nails have grown out.

We can find no reference to methylodopa causing such changes, though the tyrosine/dopa/melanin metabolic cycle might possibly be influenced thereby. Three cases of generalized skin pigmentation occurring during cyclophosphamide therapy have been reported independently by Glazebrook,¹ Rose,² Gibbs,³ Solidoro and Saenz,⁴ briefly mention skin and nail pigmentation as a side

effect of the drug, and one case of generalized pigmentation with darker pigmentation of the nails occurring during treatment of a case of Hodgkin's disease is known to the manufacturers, W. B. Pharmaceuticals Ltd.⁵ We can find no references to pigmentation of the teeth.

We wish to thank Professor N. R. Butler for permission to report this case.

—We are, etc.,

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C. B. S. WOOD

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- 1 Glazebrook, G. A., in *Cyclophosphamide*, ed. G. H. Fairley and J. M. Simister, p. 128. Bristol, John Wright, 1964.
- 2 Rose, F. C., in *Cyclophosphamide*, ed. G. H. Fairley and J. M. Simister, p. 120. Bristol, John Wright, 1964.
- 3 Gibbs, A. E., in *Cyclophosphamide*, ed. G. H. Fairley and J. M. Simister, p. 130. Bristol, John Wright, 1964.
- 4 Solidoro, A., and Saenz, R., *Cancer Chemotherapy*, 1966, 50, 265.
- 5 Simister, J. M., personal communication.

Pyramid Plan for Eye Care

SIR,—Professor J. G. Russell (18 March, p. 739) writes that authorities must strive to achieve the best results with the amount of national income allocated, and brings convincing evidence to show that team effort in a pyramid plan will increase cost-effectiveness and job-satisfaction in the dental service. The eye service has much in common with the dental service. It has a community-based sector (general ophthalmic service) and a school sector; the ratio of community attendances to outpatient attendances to inpatients in dentistry is 370:38:1, in ophthalmology 56:24:1; (in general surgery the ratio is —:3.5:1); it requires expertise and instruments not available in the general medical service; and it is heavily involved in technical procedures which can be carried out by non-medical staff. In the eye service the unique conceptual skills of the ophthalmologist and the technical skills of the ophthalmic optician are squandered,

cost-effectiveness is low, and job-satisfaction is low. There is room for improvement.

In 1944 Squadron Leader Scoular wrote¹ that it was opportune to try to improve the eye service of the nation and suggested that eye clinics should be set up staffed by ophthalmologists and opticians. These clinics would provide sight tests, diagnosis and treatment of disease, and dispensing of glasses and only those requiring operations or special treatment would be sent to hospital. In 1947 the Eye Service Committee in its report² stated "We feel sure that in a service in which ophthalmologists and opticians work together as a team mutually satisfactory arrangements can and will be