received in answer to requests which were sent to both the specialist in community medicine for child health (SCM) and the child's general practitioner (GP) for the immunization records of children included in the National Childhood Encephalopathy Study. Both the SCM and GP supplied records for 690 of these children and there was agreement that 85 (12 per cent) had received no immunizations of any kind. In the cases of another 102 children (15 per cent) the records disagreed on whether or not the child was immunized, with one record providing details while the other (often the GP record) stated "no record of immunization." The records of the remaining 503 children (73 per cent) agreed that the child had been previously immunized, but by no means all agreed on what had been given or when.

Out of a total of 1,271 immunization procedures in which either diphtheria/tetanus/pertussis or diphtheria/tetanus vaccine had been given, there was disagreement concerning which of the two types had been given for 104 (eight per cent) of the procedures. This figure was halved after extensive further enquiries to try to reconcile the differences, although several entirely new discrepancies then appeared. Many discrepancies concerned the date on which immunization had been given. The SCM and GP disagreed on the date of 214 (14 per cent) of the 1,493 occasions on which the 503 children were immunized. Further enquiries resolved less than half of these differences.

Recent concern about the use of pertussis vaccine and possible serious adverse reactions underlines the need for accurate records of immunization if adequate surveillance of the use, effectiveness and safety of vaccines is to be achieved. Our study has shown that much greater care and attention are required in compiling records of immunizations if they are to be sufficiently reliable for these purposes, as well as for the clinical and legal reasons to which Dr Gadsby directs attention.

N. S. B. RAWSON
Medical Statistician
R. ALDERSLADE
Lecturer in Community Medicine
D. L. MILLER
Professor of Community Medicine
Middlesex Hospital Medical School
Horace Joules Hall
Central Middlesex Hospital
London NW10 7NS.

Reference

Rawson, N. S. B., Alderslade, R. & Miller, D. L. (1980). Discrepancies in immunization records. *Community Medicine*, 2, 202-208.

THE COST OF PRESCRIBING

Sir,

I congratulate J. C. Murdoch on his paper on "The epidemiology of prescribing in an urban general practice" (October *Journal*, 1980). In it he states "The desired outcome of audit of our prescribing should be increased quality of care for the individual patient, not primarily therapeutic purity or saving of resources." I think the aim should be the attainment of all these outcomes but that attempts should also be made to measure the cost of prescribing, especially now in the financial climate of recession, inflation and cash limits.

I analysed all the prescriptions in our three-man rural non-dispensing practice for the month of October 1977 with regard to age, sex, drug, morbidity, ingredient cost and whether a repeat or consultation prescription. The demography of the two villages which we serve was known and therefore the incidence and prevalence of the prescribing could be estimated as well as its cost.

I found that in October 1977, 2,848 items of prescriptions costing £5,039·57 for a population of 6,496 were prescribed to 1,492 patients. The expenditure on drugs was concentrated as expected where the greatest total of prescriptions fell, namely in the age groups over 60 years; there was little difference in relative costs in items prescribed when the patient consulted the doctor or was given a repeat prescription.

However, for true comparisons, populations should be standardized to unit costs; the figure shows the total ingredient cost per 100 members of the population in each five-year age group. The costs rise sharply after 75 years of age due to the fact—demonstrated by Murdoch in his paper and confirmed in my study—that as age increases so the proportion of the population receiving prescriptions rises to almost 70 per cent over the age of 80 and 100 per cent over the age of 95. The older patients are, the more they are likely to have prescriptions, and the more expensive their age group drug bill per person becomes.

Whether the drug is appropriate, effective, still required, and the cheapest to give the required therapeutic effect, is important to the patient and to the purchaser of the drug (largely the tax payer on behalf of the patient). The general practitioner is responsible for prescribing 80 per cent of the National Drug Bill (*Merrison Report*, 1975), and the retired population consume it for their increasing morbidity; general practitioner prescribing is open-ended. Attempts to contain the rising drug bill should bear these points in mind. It surely behoves us to include the cost of prescribing in our therapeutic considerations, since there are implications for our patients, the tax payer and the pharmaceutical industry.

B. J. STEVENSON
Haymeads, Brighton Road
Sway, Lymington
Hampshire SO4 0EB.

Reference

Report of the Committee of Enquiry into the Regulation of the Medical Profession. (1975). Merrison Report, London: HMSO.

Distribution of ingredient cost of prescribing in the practice for the month of October 1977 expressed as unit costs per 100 population in five-year age groups.