

population. The three reports from general practices<sup>1-3</sup> are therefore highly relevant being much less likely to reflect mass hysteria than studies from female residential institutions in the grip of an outbreak. Calder and Warnock<sup>3</sup> point out that their practice look after the families of naval personnel but not the servicemen themselves, some of whom will presumably reside together. Despite the warnings of May and colleagues,<sup>9</sup> further studies of BME would therefore seem desirable. General practitioners may have an advantage in being able to view the illness more objectively.

The proportion of any practice population with high Coxsackie B virus antibody titres must relate to the last epidemic. In their study Bell and her colleagues<sup>6</sup> sampled their normal controls between 1973 and 1978 and their hospital patients between 1979 and 1980 but argue that as the last epidemic of Coxsackie B virus infection was in 1965 their results are unlikely to be biased. Future studies by general practitioners would be enhanced by a control sample taken contemporaneously from the same population because of the well recognized and numerically considerable proportion of sub-clinical infections that occur in all enteroviral outbreaks. Unless sera can be stored deep frozen pending later examination, it might be prudent to await the general availability of specific immunoglobulin M (IgM) testing<sup>10</sup> that may decisively confirm or refute the present hypothesis that BME may be causally related to

enteroviral infection or more specifically to infection with one of the Coxsackie B viruses.

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# Prescribing—a suitable case for treatment

OF THE many activities undertaken by doctors in general practice, prescribing has for long attracted considerable attention. Although about one third of consultations in general practice do not lead to a prescription, nevertheless two thirds do.

Prescribing decisions by general practitioners are causing concern on two quite separate fronts. On the one hand, the profession, patients and government are concerned about the quality of prescribing, its safety, its relevance and its effectiveness, while on the other, government is increasingly concerned that the cost of general practitioner prescribing dwarfs the cost of hospital prescribing. The prescription costs of the average British general practitioner now exceed the cost of the doctor's own income and all his expenses combined.

Given these twin pressures of quality and cost, it is natural that studies of general practitioner prescribing will continue to be of interest. One of the new developments is the possibility of employing computerized techniques both to analyse data from such studies and to provide information to the doctors who write the prescriptions. It has now become possible to link computer technology with modern ideas in continuing education where the importance of participation and feedback are

increasingly accepted. These are not new ideas; evidence to the Tricker Report by the Royal College of General Practitioners<sup>1</sup> emphasized the importance of computerizing the Prescription Pricing Authority so that in the future individual practitioners would be provided with a quick and professional analysis of the consequences of their prescribing decisions.

In *Prescribing—a suitable case for treatment*,<sup>2</sup> Dr Conrad Harris and his colleagues from the Department of General Practice at St Mary's Hospital Medical School, London, applied these ideas to a group of general practitioners in London. First, they analysed the prescriptions and compared them with a control group, but also—and this is the central point of this study—they offered educational programmes to the experimental group of practitioners and, working with the Prescription Pricing Authority, offered them information about their prescribing decisions.

In fact, the experimental group reduced their level of prescribing substantially more than the controls, and furthermore, the reduction in prescribing was selective. The cost per thousand patients rose for all groups but was considerably less for the experimental group whose costs were calculated as £136.00 per doctor at November

1980 rates. Extrapolated nationally such savings would exceed £60 million a year. On more detailed analysis it appeared that the 'educated' practitioners prescribed less, prescribed generically more, and moved towards cheaper equivalent drugs.

This study appears to be important because it links one important aspect of the quality of care (prescribing) with one important principle of continuing education (feedback to participating doctors). With such a major new organizational resource as computerization available to general practitioners, it is a scientifically sound, dignified and courteous way of helping colleagues to keep up to date and compare their clinical decisions with those of local colleagues. It is professional, in the sense that general practice is reviewing one of its activities in the light of group discussion, and is rational in the sense that decisions are based on the factual evidence of an interesting medical audit.

The implications for clinical audit studies of this kind are profound and, although there are some methodological problems about selection, data processing and interpretation which are not finally concluded in this particular study, nevertheless the concept is reproducible and seems in urgent need of revalidation elsewhere.

## References

1. Tricker Report. *Inquiry into the prescription pricing authority*. London: HMSO, 1977.
2. *Prescribing—a suitable case for treatment, Occasional paper 24*, is available from the Publication Sales Office, 8 Queen Street, Edinburgh EH2 1JE, price £3.75 including postage. Payment should be made with order.

## Internal population movements in the United Kingdom

Based on movements of doctors' patients between different Family Practitioner Committees (FPCs) in England and Wales and to and from Scotland and Northern Ireland, these figures provide an indication of internal migration flows within the United Kingdom, which

OPCS considers reliable. Compared to the previous year, total movement between regions increased by about 3 per cent during 1982. There was a similar increase in the number of moves between FPCs within most regions.

Number of people (thousands) recorded as moving within and between areas of United Kingdom, 1982.

Area	1981				1982			
	Within area	With rest of UK			Within area	With rest of UK		
		In	Out	Net		In	Out	Net
United Kingdom		807	807	—		830	830	—
Great Britain		800	797	+ 3		823	820	— 3
North	30	39	47	— 8	32	42	46	— 3
Yorkshire & Humberside	47	68	73	— 5	47	71	76	— 5
East Midlands	20	77	72	+ 5	22	78	75	+ 3
East Anglia	9	54	43	+11	10	57	43	+14
South East	479	221	211	+10	484	224	219	+ 4
Greater London	156	155	187	— 32	151	157	191	— 34
Remainder	134	254	212	+ 42	139	260	222	+ 38
South West	40	108	88	+ 20	43	115	89	+ 26
West Midlands	65	67	79	— 12	68	71	84	— 13
North West	95	75	94	— 20	95	75	96	— 20
Wales	21	45	42	+ 3	22	46	44	+ 3
Scotland	84	47	48	— 1	80	44	50	— 5
Northern Ireland		7	10	— 3		7	10	— 3

Notes: 1. Figures are derived from re-registrations recorded at the National Health Service Central Registers and are lagged by three months to make allowance for the time between actual move and re-registration. 2. Movements 'within area' are those between FPCs in the area (for England and Wales) and between AHBs (for Scotland).

Source: Office of Population Censuses & Surveys. *OPCS Monitor* 1983; MN 83/4: 1-3.