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How many general practitioners for 1433 patients?

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Dumbiedykes, in Lothian, is an inner city council estate of 670 homes in Edinburgh. About half of the residents are registered at the Mackenzie Medical Centre. We ascertained the total number of general practitioners and partnerships with patients living in Dumbiedykes and determined the number of patients registered with each practice.

Method and results

We obtained from the community health index, which lists all patients registered with general practitioners in Scotland, the 12 postcodes of Dumbiedykes and the name of each resident's general practitioner. We summarised this list of patients according to each patient's general practitioner and grouped the patients into practices using a list of Lothian general practitioners by practice.

In all, 1433 patients were registered in Dumbiedykes in 1993. The population of Dumbiedykes is relatively stable (only 7% of households had moved there in the 12 months before the 1991 census). In total, 87 general practitioners had patients resident in Dumbiedykes registered on their lists. These principals represented 43 practices with 147 partners. As a shared list system generally operates in Edinburgh, most of these 147 doctors occasionally provide general medical services to residents of Dumbiedykes.

The table shows the number of practices serving Dumbiedykes by the number of Dumbiedykes patients registered with each practice. The distances of the practices from Dumbiedykes vary considerably, with seven practices within one kilometre (the Mackenzie Medical Centre, at some 400 metres) and two practices outside the city's boundary. In all, 283 patients were registered with practices more than

one kilometre away, and many patients registered at the Mackenzie Medical Centre lived well outwith its catchment area.

Comment

Small inner city areas are often served by many doctors. Our findings suggest that 31% of Lothian practices provide services to Dumbiedykes, which has only 0.16% of the total population of Lothian. We acknowledge, however, that it is hard to extrapolate far from our findings, which may be area specific.

Several implications may arise, however, for general practitioners, community nurses, and managers in primary care. A more cost effective and practical means of providing primary medical care may be to rationalise catchment areas. Patients, however, as consumers of health care are encouraged to make choices about their own care including, for example, selecting their own general practitioner. Imposing rigid catchment areas might seem to be in direct conflict with the ethos of recent reforms. The reforms also advocated, however, efficient and effective use of resources. Providing care to a widely scattered population entails more travelling for patients, doctors, health visitors, and district nurses.

Distance and travelling time are also potential barriers to general practitioners being able to provide a safe and prompt service. Patients value accessibility. The most common reason why patients change their general practitioner without moving is to register with a closer doctor.¹ Most people moving into a new area register with the nearest practice.² With fewer scattered patients a more community oriented primary care³ responsive to local health and social problems may be easier to develop.

Patients' wishes to choose (and retain when moving) their general practitioner may need to be balanced against any decrease in quality of care for other patients that might ensue. Mapping practice populations by postcode may help practitioners to rationalise gradually their practice areas. The enthusiastic recommendation of a neighbouring practice may allow some patients to feel that they will have continuity of care despite changing surgeries.

Most general practitioners who work in urban areas receive a request every week from a patient moving outwith the practice area to stay on the practice list. Exceptions may be made, sometimes for financial reasons to maintain capitation charges but usually because the patient values highly his or her relationship with the doctor. We need rational policies overall, but exceptions may also be necessary.

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*Numbers of patients from Dumbiedykes registered with various general practices. * Values are numbers (cumulative percentages) unless stated otherwise*

No of patients from Dumbiedykes registered in each practice	No of practices (No within 1 km of Dumbiedykes)	Patients in Dumbiedykes	
		Registered with practice	Registered with practice within 1 km of Dumbiedykes
> 500	1 (1)	602 (42)	602 (42)
100-499	2 (2)	301 (63)	301 (63)
50-99	2 (2)	186 (76)	186 (76)
20-49	6 (2)	201 (90)	61 (80)
10-19	5 (0)	57 (94)	0 (80)
3-9	12 (0)	57 (98)	0 (80)
1 or 2	15 (0)	29 (100)	0 (80)
Total	43 (7)	1433	1150

*Data do not include patients who might have moved to Dumbiedykes but had not yet reregistered.