

Provision of, and patient satisfaction with, primary care services in a relatively affluent area and a relatively deprived area of Glasgow

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SUMMARY. *This paper presents the results of a survey of the structure of general practice in two contrasting areas within Greater Glasgow health board: the south west area had a more deprived social profile at the 1981 census and higher than average all cause and selected major cause standardized mortality ratios than the health board as a whole while the north west area had a more affluent social profile at the 1981 census and lower than average all cause and selected major cause standardized mortality ratios. The general practice survey data gathered in 1989 were supplemented with data from a survey of residents of the localities in three age cohorts carried out in 1987–88, which provided information on use of services, as well as perceived accessibility of and satisfaction with them. Despite the more deprived social and mortality profile of the south west area, and greater use of services, few systematic differences in the structure of general practices were found in the two areas. These findings support other studies which suggest that the stereotype of poorly resourced, low quality primary care in inner city areas may apply in London, but not elsewhere. Respondents in both areas were equally satisfied with services and found them accessible.*

Keywords: *GP services; GP statistics; access to GP; GP utilization; inequalities in health; quality in general practice.*

Introduction

FOR a long time, concern has been expressed about the provision of primary care in deprived areas, or more specifically, in inner city areas. The Acheson report on primary health care in inner London reinforced the view that the inner cities of the United Kingdom have some of the worst social and health problems in the country, combined with some of the poorest primary care.¹ A more recent analysis of need for and provision of general practice in London concluded that 'inner London tends to have greater quantity but lower quality of general practice'.² However, a more detailed study of general practice in Greater Manchester in the early 1980s did not confirm this view.^{3–5} The Manchester study found no evidence that general practice in inner city areas, or even in the most deprived areas of the city, was poorer than in other parts of the city. Indeed, there were few systematic differences between areas in

either the structure of the practices or in patterns of care, and these authors suggested that 'at least in Manchester, and probably in other provincial cities of the United Kingdom, the stereotype of the inner city doctor seems to have little foundation in reality'.⁴

There are suggestions, however, that general practices in deprived areas face particular problems in providing good quality care. These problems are related to decreasing numbers of people living in these areas, resulting in inability to maintain list sizes, as well as to a highly mobile and transitory population,⁶ resulting in difficulty in reaching large proportions of the practice population with preventive health measures.⁷ Both of these problems result in lower practice income. Practices in these areas are therefore less likely to be high investors or to be innovative.^{8–10} It has been suggested that the 1990 contract for general practice¹¹ may further penalize practices in areas with a static or declining population since it has altered the balance of general practice payment towards capitation fees.¹² However, the 1990 contract recognized that patients in deprived areas may create higher workloads than those in more affluent areas, owing to larger numbers of consultations and greater reluctance to take part in screening and preventive health activities. Deprivation payments were introduced to allow for smaller list sizes and difficulty in reaching targets for preventive health work. General practitioners are now eligible to receive a deprivation payment for each patient resident in a 1981 census ward identified as deprived according to the underprivileged area score index.¹³ However, the choice of criteria for allocating these payments has been widely criticized,^{14,15} and it remains to be seen whether general practitioners operating in deprived areas are indeed able to maintain income levels.

The effective distribution of health care resources is an important objective of government health policy, yet the distribution of general practice resources has received little attention.² Apart from studies in London and Manchester,^{2–4,16} to our knowledge, few others have systematically examined variations in a wide range of practice structure variables and in the provision of services in relation to characteristics of the areas they serve. This means that although directors of public health have data on sociodemographic and mortality differences between areas, few have information about characteristics of primary care in these areas.

This paper presents the results of a survey of general practice in two contrasting localities within the Greater Glasgow health board area; one relatively deprived area and one relatively affluent area. The data were collected before the introduction of the 1990 contract, as part of the 'west of Scotland twenty-07 study: health in the community', a longitudinal study of health and everyday life in the central Clydeside conurbation. A major aim of this study was to examine features of the social, economic and physical environment which could have an impact upon people's health and on their ability to lead healthy lives. One such element might be the provision and accessibility of primary health care services, and therefore a survey was conducted of the structure of general practice in or on the periphery of the two contrasting localities. Three questions underpinned this

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survey. Did practice structure differ between the two localities? Were there any associations between practice structure in the two localities and the health and sociodemographic characteristics of the inhabitants? Was there a difference in service use and/or in perceived accessibility of, and/or satisfaction with, general practice between the localities? This paper addresses these questions, supplementing the practice survey data with data from a survey of three age cohorts living in the two localities.^{17,18}

The localities

One locality is in the north west and the other in the south west of the city of Glasgow. They were chosen for intensive study on the basis of social and residential characteristics known to be highly correlated with mortality from all causes, and other health indices. The north west area was selected to represent a relatively affluent area and the south west area to represent a relatively deprived area, but neither is homogeneous in social composition or environment nor at the extreme of affluence or deprivation within Glasgow. Further details about the selection of the localities have been reported previously.¹⁹

Sociodemographic characteristics of the locality populations were extracted from the 1981 census, which although now over 10 years old, provided the best available population data. The south west area had a total population of approximately 60 000 at the time of the 1981 census, while the north west area had a total population of approximately 51 000. The two localities had slightly different age profiles, so that although the proportion of the populations who were women aged 16–59 years or men aged 16–64 years were similar (59.0% in the south west area and 59.1% in the north west area), there were larger proportions of children in the south west area than in the north west area (6.4% were aged 0–4 years compared with 3.4%; 18.8% were aged 5–15 years compared with 10.3%). There were also smaller proportions of older people in the south west area than in the north west area (10.9% aged 60–74/65–74 years compared with 17.4%; 4.9% aged 75 years or more compared with 9.8%). Table 1 shows that in the south west area more heads of household were in a manual occupation and fewer households owned a car than in the north west area.

All cause standardized mortality ratios for both men and women were calculated for both localities for 1980–82, based on aggregate enumeration districts and using Greater Glasgow

health board as the standard population (ratio = 100). As expected, standardized mortality ratios were higher in the south west locality (men: 110 (95% confidence interval²⁰ 100 to 121); women: 121 (95% CI 107 to 135)) than in the north west locality (men: 86 (95% CI 77 to 95); women 80 (95% CI 69 to 91)). Standardized mortality ratios for all major causes were also calculated and showed the same pattern.

Method

Survey of general practice

We aimed to include in the survey all general practices in each locality, together with those within a quarter of a mile of its boundaries (described here as on the peripheries). At the time of the survey (May/June 1989) there were 37 practices in or on the periphery of the north west locality, eight of which were located in one health centre; and 12 practices in or on the periphery of the south west locality, two of which were located in one health centre.²¹ It was decided to approach only two practices in each health centre in order to avoid duplicate information and maximize response to the survey. These two practices were chosen randomly from the eight practices in the north west health centre. Thus 31 practices in the north west area and 12 practices in the south west area were approached for interview.

The practices were first sent a letter addressed to all principals describing the research and its purpose, and told that an interviewer would be contacting them to ask if they would be willing to take part within the next week. Twenty one north west and 10 south west practices agreed, giving response rates of 68% and 83%, respectively. Reasons for refusing to participate were diverse, but an atmosphere of mistrust created by the recent government white paper²² and the then forthcoming new contract for general practice¹¹ was reported to us by doctors.

The structured and pre-coded interviews were conducted by a trained and experienced interviewer, with a member of practice staff designated by the practice (doctor, practice manager or receptionist). They lasted about half an hour. Questions covered basic practice structure (such as number of principals and other employed or attached staff), list size, doctors' characteristics, and features of practice organization such as provision of special clinics and registers.

Survey of residents of the localities in three age cohorts

During 1987–88 surveys were undertaken of nearly 300 people in each of three age cohorts (15, 35 and 55 years) in each locality. The sample was a two stage stratified random cluster sample, using Strathclyde Regional Council's enhanced electoral register. This provided information on the age and sex distribution in each household. At the first stage, in which Strathclyde Regional Council asked potential respondents for written permission to pass their names on to the Medical Research Council, 912 people in the north west locality and 1002 in the south west agreed (63% and 62% in each locality, respectively). At the second stage a team of trained interviewers contacted these people, and 790 in the north west and 851 in the south west agreed to be interviewed (87% and 85% of those asked, respectively). A wide range of data were collected in two face to face home interviews with respondents aged 35 and 55 years, and in interviews with the parents of the 15 year old cohort. Questions relevant to this study covered health service use and perceived accessibility of, and satisfaction with, general practice.

Statistics

Chi square tests or analysis of variance were used to ascertain whether practice structure and residents' use and perception of services were significantly different in the two areas.

Table 1. Selected sociodemographic characteristics of the populations in the two localities taken from the 1981 census.

	% of households	
	North west area (n = 1225)	South west area (n = 1131)
<i>Occupational social class of head of household^a</i>		
1	13.9	0.9
2	31.3	5.7
3N	14.9	9.2
3M	24.2	43.2
4	9.9	23.3
5	3.0	13.3
Armed forces or inadequately described	2.8	4.3
	$\chi^2 = 555.5, P < 0.001$	
With no car	52.6	74.5
	$\chi^2 = 119.0, P < 0.01$	

n = total number of households. ^aRegistrar general's classification.

Results

Survey of general practice

Despite the more deprived social and mortality profile of the south west locality, few systematic differences in the structure of general practices between the localities were found. Table 2 shows that similar proportions of practices in both localities were group practices (three or more partners); had small list sizes per full-time equivalent doctor (less than 1500); were training practices; had at least one woman partner; employed a practice nurse or practice manager; used an appointment system; and held an age-sex register. However, a significantly larger proportion of practices in the south west locality practised from purpose built accommodation ($\chi^2 = 5.2, P < 0.05$). There were other differences between the two localities, but they did not reach statistical significance: a larger proportion of practices in the south west area provided well woman and cervical cytology clinics and had attached community nurses and more allotted the smallest amount of time per patient in normal surgeries (between three and five minutes) (Table 2). An examination of the doctors' characteristics showed that a larger proportion of doctors in the south west region had qualified more recently, and a smaller proportion were members of a royal college (Table 3).

Information from the survey of residents in three age cohorts

Only respondents (or 15 year old's parents) who said they were registered with the 31 study practices were included in an examination of the use and perceived accessibility of, and satisfaction with, general practices within the localities. In the older two cohorts, respondents in the south west area reported significantly more consultations in the last 12 months than respondents in the north west area; the parental report of the mean number of consultations was the same in each locality for the 15 year olds (Table 4).

As a measure of preventive service use women were asked when they had last had a cervical smear: 75% of the 67 women aged 35 years reported having had a smear in the last five years in the south west area compared with 84% of the 86 women in the north west (this difference was not statistically significant). Similar proportions of women aged 55 years in the south west and north west areas had had a smear in the last five years (59% of 64 and 56% of 108, respectively).

Cohort respondents were asked how they usually got to the surgery and how long it took them (Table 4). Significantly more respondents in the south west area walked to the surgery than in the north west. The amount of time it took respondents to reach the surgery was similar in both areas.

Very high levels of satisfaction with their general practitioners were recorded in both localities. Over 80% of respondents in each age group in both localities reported being very or quite satisfied with their general practitioner (Table 4).

Discussion

This paper has presented the results of a survey of the structure of general practice in two contrasting localities in Glasgow. The general practice survey data were supplemented with data from a survey of residents of the localities in three age cohorts, which provided information on use of services, as well as perceived accessibility of and satisfaction with them. Despite the more deprived social and mortality profile of the south west locality, few systematic differences in the structure of general practices were found.

These findings support those from a survey of general practice in Greater Manchester, undertaken in the early 1980s, which found no evidence of poorer general practice in more deprived

Table 2. Characteristics of general practices in the two areas.

	Number (%) of practices	
	North west area (n = 21)	South west area (n = 10)
<i>No. of partners</i>		
1	7 (33)	1 (10)
2	4 (19)	4 (40)
3+	10 (48)	5 (50)
<i>Mean list size per full-time equivalent doctor</i>		
<1500	5 (24)	3 (30)
1500-2499	15 (71)	6 (60)
2500+	1 (5)	1 (10)
<i>Training practice</i>		
	2 (10)	1 (10)
<i>At least one woman partner</i>		
	18 (86)	9 (90)
<i>Employed or attached staff</i>		
Practice nurse	2 (10)	1 (10)
Community nurse	10 (48)	8 (80)
Practice manager	8 (38)	4 (40)
<i>Used appointment system</i>		
	14 (67)	7 (70)
<i>Held an age-sex register</i>		
	18 (86)	8 (80)
<i>Practised from purpose built accommodation</i>		
	4 (19)	6 (60)
<i>Clinics provided</i>		
Well woman	7 (33)	7 (70)
Cervical cytology	9 (43)	8 (80)
<i>Mean amount of time allotted per patient (minutes)</i>		
3-5	7 (33)	7 (70)
6-8	8 (38)	1 (10)
9+	3 (14) ^a	2 (20)

n = total number of practices. ^a Data missing for three practices.

Table 3. Characteristics of general practitioners practising in the two areas.

	Number (%) of GPs	
	North west area (n = 51)	South west area (n = 31)
<i>Year of qualification</i>		
1940-49	1 (2)	2 (6)
1950-59	8 (16)	3 (10)
1960-69	17 (33)	5 (16)
1970-79	15 (29)	10 (32)
1980-89	5 (10)	4 (13)
Data missing	5 (10)	7 (23)
<i>Member of a royal college</i>		
Yes	26 (51)	11 (35)
No	19 (37)	14 (45)
Data missing	6 (12)	6 (19)

areas of the city.³⁻⁵ Of course, the present study concerned only the structure of general practices, no data being collected on the process or the outcome of the care provided,²³ and thus we cannot comment on the adequacy or otherwise of the primary

Table 4. Residents' use and perceived accessibility of, and satisfaction with, general practice.

	Age group					
	15 years		35 years		55 years	
	North west area (n = 146)	South west area (n = 176)	North west area (n = 165)	South west area (n = 112)	North west area (n = 177)	South west area (n = 118)
Mean no. of consultations in last 12 months	2.0	2.0	2.2 ^a	3.5 ^b	2.8 ^c	3.9
			F = 6.2, P<0.05		F = 5.6, P<0.05	
Transport used to get to surgery (% of respondents)						
Walking	46	71	43	71	42	59
Public transport	20	20	12	15	19	16
Car	34	9	45	14	39	25
	$\chi^2 = 33.1, P<0.001$		$\chi^2 = 29.0, P<0.001$		$\chi^2 = 9.25, P<0.01$	
Time to get to surgery (% of respondents)						
<15 minutes	86	88	92	86	93	91
16+ minutes	14	12	8	14	7	9
% of respondents very/quite satisfied with their GP	83	84	80	83	83	88

n = total number of respondents. ^a n = 162. ^b n = 108. ^c n = 176.

care provided for residents of the two localities, nor on whether their health care needs were met. Data from the three cohort survey of locality residents showed that the mean number of consultations in the last year was higher in the relatively deprived area than in the relatively affluent area, indicating greater use of and demand for services. However, perceived accessibility of, and satisfaction with, practices was equally high in both localities.

Thus, this study did not confirm the stereotype of elderly, isolated, single handed general practitioners working in deprived areas with small list sizes and lacking the resources for good care.¹ Rather, it supports the authors of the Manchester study who suggested that the problems of inner city practice may be restricted to London, and not to other provincial cities in the UK.⁵ The stereotype of a deprived inner city area is inappropriate in Glasgow, where deprived areas are located towards the periphery of the city. The differences in practice structure between the two localities found in this study, with the relatively deprived area more likely to practise from purpose built accommodation, to have community nursing staff and to operate health promotion clinics, are probably due to local policy to direct resources for health centres into deprived areas (Greater Glasgow health board, health promotion strategy, 1991).

The white paper *Promoting better health* recognized a need for more women doctors in general practice, since many women patients prefer to consult a doctor of their own sex, particularly for sex-related conditions.²⁴ It is considered particularly important that a woman doctor be available to encourage uptake of cervical screening. Thus, it is reassuring that overall accessibility to women doctors was high in both localities.

The finding that the time allotted for patients in ordinary surgeries tended to be less in the relatively deprived area than in the more affluent locality is interesting. Other studies have shown a relationship (although not necessarily a linear one) between personal list size and the number of hours doctors spend in surgery consultations,^{5,25} although only a weak relationship was found between list size and consultation length for individual patients.²⁵ However, mean list size per full-time equivalent doctor was similar in the two localities, so differences in list size cannot explain the differences in appointment length found here. Shortage of time is usually blamed by both general practitioners

and patients for failure to deliver high quality care and two outcomes shown to be affected by lengthening consultations are higher patient satisfaction and the doctor initiating more health education/prevention in the consultation.²⁶ It is possible that greater use of services in the less affluent area, as demonstrated by higher mean number of consultations in the two older cohorts in the last 12 months, led to less time being available for each patient in ordinary surgeries. As practices in this area also tended to hold more health promotion clinics it is possible that health education and prevention issues were discussed at these clinics rather than in surgeries, so that less time was actually needed. However, no data were available on the content of consultations, and indeed, on how long the consultations actually lasted, which may bear little relation to the amount of time officially allotted to patients.

There is evidence that women from deprived backgrounds are less likely to undergo cervical or other screening,²⁷⁻²⁹ but in the present study similar proportions of women living in each locality had had a recent smear. It is possible that the higher proportion of general practices in the relatively deprived area holding cervical screening and well woman clinics reflected a high degree of commitment to screening in these practices and that this may have contributed to the relatively high uptake rates among women in this locality.

In summary, despite indications of a greater need for services, and certainly a higher use of services among respondents in the relatively depressed south west area of Glasgow compared with the more affluent north west locality, there were few differences in the provision or structure of general practices. Thus the stereotype of poorly resourced and low quality primary care in deprived inner city areas may apply in London but not elsewhere in the UK. Respondents in both areas were equally satisfied with the services, and found them equally accessible.

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RCGP

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RESEARCH TRAINING FELLOWSHIPS IN GENERAL PRACTICE

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Remuneration will allow a doctor to spend up to four sessions per week for a maximum of two years on a research project but flexibility will be allowed in terms of allocation of time for individual research work.

Applicants will be expected to have a formal link with a university department of general practice, RCGP research unit or department of postgraduate medicine. Limited funds are available towards the costs of this support up to a maximum value of 10% of the value of the fellowship awarded.

Applications should include a summary of the proposed research and details of the relationship with the supporting academic unit, together with confirmation of the arrangement from the head of the academic unit involved.

Application forms and further details can be obtained from the Clinical and Research Division, Royal College of General Practitioners, 14 Princes Gate, London SW7 1PU, to whom applications and curriculum vitae should be submitted by 1 August 1992.

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RESEARCH FUNDING

Applications are now being received for grants for research in or relating to general medical practice, for consideration at the May 1992 meeting of the Scientific Foundation Board. In addition to its general fund the Board also administers specific funds including the *Windebank Fund for research into diabetes*.

The Scientific Foundation Board's definition of research is catholic and includes educational research, observational as well as experimental studies, and accepts the methodologies of social science as valid. It is not in a position to fund educational activities.

If the study involves any intervention or raises issues of confidentiality it is wise to obtain advance approval from an appropriate research ethics committee otherwise a decision to award a grant may be conditional upon such approval.

Studies which do not, in the opinion of the Board, offer a reasonable chance of answering the question posed will be rejected. It may sometimes be useful to seek expert advice on protocol design before submitting an application.

Care should be taken to ensure that costs are accurately forecast and that matters such as inflation and salary increases are included.

The annual sum of money available is not large by absolute standards and grant applications for sums in excess of £15 000 are unlikely to be considered.

Application forms are obtainable from the Clerk to the Board at: The Scientific Foundation Board, 14 Princes Gate, London SW7 1PU. *The closing date for receipt of completed applications is 25 September 1992; any forms received after that date will, unfortunately, be ineligible for consideration.*