

General Practice in Scotland—Why the Difference?

A Comparative Study of Statistics From Practices in the United Kingdom

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Does the Health Service need a "Beeching" overhaul? It is significant that the Gillie Report (Central Health Services Council, 1963) recommends that "operational research is required into the working of general practice and the Health Service as a whole," and concludes, among other things, "that the time is now ripe for objective examination of the work of the family doctor." But is the urgency for such an appraisal fully realized? The setting up of a working party to inquire into the work of the family doctor is certainly a step in the right direction, so long as it is realized that the solution will not appear overnight. Nothing short of a carefully planned comprehensive investigation into the work of general practitioners to-day will answer the questions posed in this and other papers; and this, to be done properly, will take time. Without such an inquiry, who could possibly explain why the work done by general practitioners in Scotland would appear to be considerably greater than that undertaken in England? This is only one of many findings made by a comparison of the work done by my two partners and myself in a compact industrial practice in North Ayrshire with that of others practising in various parts of the United Kingdom.

The Practice

The practice is situated at the north-west limit of a narrow industrial strip crossing central Ayrshire and is conducted from a central surgery by three principals sharing the work equally. Two receptionists are employed, and since January 1962 a full appointment system has been in operation. In addition to general medical services, maternity work is undertaken (Stevenson, 1961), and open access to pathological and radiological services is available to all practitioners in the area. Liaison with our specialist colleagues is excellent.

The majority of our patients are employed in the chemical industry at Ardeer Factory, I.C.I., and fall in the main into social group III. Throughout the period under review (January 1957 to December 1963) the unemployment rate has been considerably higher than the national average. There is virtually no private practice.

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TABLE II.—Actual and Percentage Increase or Decrease Compared with Previous Year

Year	Practice Size		New Calls		Revisits		Total Home Visits		Surgery Attendances		Total Consultations	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1958	+ 89	1.7	- 487	10.4	+ 150	1.2	- 337	1.9	- 982	5.1	- 1,319	3.5
1959	+ 172	3.3	+ 502	12	+ 986	7.6	+ 1,488	8.7	+ 637	3.4	+ 2,125	6.0
1960	+ 168	3.1	+ 311	6.7	- 884	6.4	- 573	3.1	+ 511	2.7	- 62	0.2
1961	+ 150	2.7	+ 131	2.6	- 1,109	7.8	- 978	5.4	- 300	1.5	- 1,278	3.4
1962	+ 140	2.4	+ 476	9.3	+ 196	1.6	+ 672	3.9	- 731	3.8	- 59	0.2
1963	+ 197	3.4	+ 379	6.8	- 1,923	15.8	- 1,544	8.6	+ 330	1.8	- 1,314	3.6
1957-63	+ 916	17.7	+ 1,312	28.1	- 2,584	20.1	- 1,272	7.3	- 635	3.3	- 1,907	5.2

The size of the practice and the work done in each year are summarized in Table I. The actual and percentage increase or decrease in the numbers over the previous year are given in Table II, which also shows the overall increase or decrease in the practice size and work done between 1957 and 1963. The figures presented in these tables do not include such items of service as seeing more than one person on a home visit or at a surgery consultation, the occasional advice given by telephone, nor the "emergency" encountered on visiting rounds. Since 1962 we have used specially prepared repeat prescription cards for those on long-term therapy—the number of times that these have been used is also not included.

TABLE I.—Summary of Practice Size and Work Done 1957-63, With Consultation Rate Per Patient Per Annum

Year	Practice Size	New Calls	Revisits	Total Home Visits	Surgery Attendances	Total Consultations	Consultation Rate per Patient
1957	5,156	4,668	12,843	17,511	19,224	36,735	7.1
1958	5,245	4,181	12,993	17,174	18,242	35,416	6.8
1959	5,417	4,683	13,979	18,662	18,879	37,541	6.9
1960	5,585	4,994	13,095	18,089	19,390	37,479	6.7
1961	5,735	5,125	11,986	17,111	19,090	36,201	6.3
1962	5,875	5,601	12,182	17,783	18,359	36,142	6.1
1963	6,072	5,980	10,259	16,239	18,589	34,828	5.7

Size of Practice.—This was calculated by taking the mean of the four quarterly totals for each year, supplied by the executive council. Lees and Cooper (1963) summarize the pitfalls in this and other ways of estimating the population at risk, and a more accurate method may have to be devised for future studies. The practice has increased in size each year, the annual variation being between 89 (1.7%) and 197 (3.4%). The overall increase in six years was 916 (17.7%).

Home Visitation

New Calls

By new calls I mean requests by the patient for a home visit. The number of these is to a great extent outside the control of the doctor. In our practice requests are made mainly by telephone, but occasionally messages are left at the surgery or picked up by one of us at two shops. The increase in requests for home visits has shown, for each year except 1958 and 1961,

a much greater percentage increase than the percentage increase in the practice size. The reduction in demand in 1958 was probably due to the high new call rate in 1957 caused by the Asian influenza epidemic. In 1961 the percentage increase in both the practice size and new calls was practically identical. The new call rate per thousand of the population at risk is given in Table III. It is interesting and slightly alarming to note that the incidence of new calls has been highest in 1962 and 1963, when our patients have been able to see us in surgery by appointment. (A complete appraisal of our appointment system will be the subject of another paper.)

TABLE III.—New Call Rate per 1,000 Patients 1957–63

Year No.	1957 905	1958 797	1959 864	1960 894	1961 894	1962 953	1963 984
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Little has been reported about the habits of patients requesting home visits. Scott and McVie (1962) record a rate of 728 per 1,000 patients in a one-year survey in two Edinburgh practices. Dr. Marjory Hogg (1963), in Dundee, had a new-call rate varying from 989 to 1,082 per 1,000 patients between 1960 and 1963. It is therefore surprising to find that Ashworth and his colleagues (1963), in the Darbshire House Health Centre, Manchester, received only 377 new calls for each 1,000 patients at risk during 1962. This compares with our own figure of 953 for the same year. Unfortunately, the practice of Ashworth *et al.* is the only English one for which I have relevant figures, but the comparatively small number of requests for home visits is significant when equated with the total number of home visits (new calls and revisits) reported from various practices in England. I have little doubt that the English patient asks for a home visit much less often than his Scottish counterpart. What the reason for this is I do not know, but it is a striking and important finding, and merits further inquiry.

Revisits

The total number of follow-up home visits is shown in Table I. The number of these is entirely at the discretion of the doctor, as distinct from new calls, which are at the discretion of the patient. It is interesting to compare our new visits and follow-up visits for 1962 with those of Marjory Hogg, of Scott and McVie, and of Ashworth *et al.* for the same year. The comparisons are shown in Table IV.

Dr. Hogg, in Dundee, has the lowest follow-up rate. This may account for the fact that the requests for home visits in her practice are highest for each 1,000 patients at risk. Three

TABLE IV.—Comparison of Home Visits in Four Practices, 1962

1962	Practice Size	New Visits		Revisits		Total Home Visits	
		No.	Rate per Patient	No.	Rate per Patient	No.	Rate per Patient
Present review	5,875	5,601	1.0	12,182	2.0	17,783	3.0
Scott and McVie	3,986	2,900	0.7	6,724	1.7	9,624	2.4
Hogg	2,617	2,636	1.0	2,981	1.2	5,617	2.4
Ashworth <i>et al.</i>	11,576	4,359	0.4	11,560	1.0	15,919	1.4

TABLE V.—Number and Time Distribution of Night Calls During 1960

	Nil	8-9	9-10	10-11	11-12	Total	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	Total	Grand Total
Jan. ..	10	—	7	1	3	11	3	1	2	3	1	2	—	2	14	25
Feb. ..	13	2	1	6	2	11	3	2	1	3	—	—	—	—	9	20
Mar. ..	14	—	3	7	1	11	—	3	3	—	—	1	1	2	13	24
Apr. ..	12	5	6	7	3	21	1	1	1	—	—	—	—	—	7	26
May ..	15	4	4	1	4	13	1	—	—	—	—	3	2	—	10	20
June ..	9	1	4	4	4	13	4	1	2	—	1	—	—	1	10	23
July ..	15	2	1	4	4	11	3	1	4	1	2	—	—	5	17	28
Aug. ..	18	6	11	4	6	27	6	1	—	—	1	1	1	1	13	40
Sept. ..	13	4	6	2	10	22	4	1	1	—	1	2	2	—	11	33
Oct. ..	22	3	2	1	3	30	—	—	—	2	—	—	—	—	2	11
Nov. ..	8	—	11	11	8	39	1	—	1	1	2	—	1	2	10	40
Dec. ..	9	1	6	9	6	22	6	3	2	2	1	1	—	2	17	39
Total	148	28	62	57	54	201	32	14	18	20	6	15	8	15	128	329

conclusions could be drawn from this: (1) the onus to recall the doctor is more often on the patient, (2) the calls are for conditions of a more trivial nature, and (3) the time necessary for revisits is not available. In Manchester, on the other hand, although Ashworth's total home visitation rate per patient is by far the lowest, the proportion of follow-up visits to first visits is the highest. One could conclude from this that in Manchester the initial request for visitation is more justifiable to the doctor's mind and subsequent follow-up in the home more necessary. The proportions of revisits to first visits in Scott and McVie's Edinburgh practice and in our own approximate very closely at just over 2 to 1.

Because of our high total home visitation rate we decided at the beginning of 1963 that we were making too many follow-up visits. During that year we assessed the need for these more critically, and as a result made 1,923 (15.8%) fewer follow-up visits than in 1962. This is probably the main factor in reducing our consultation rate (Table I, column 8) to below 6 for this first time since 1957.

Late Visits and Night Calls

Late Visits.—We constantly remind our patients that requests for home visits, except in emergency, should be made before 10.30 a.m. Despite this, in 1961, 868 (17.3%) requests for visits were made after this time. Further attempts to reduce this annoying and time-wasting practice were of no avail. In 1962 the number of late calls was 1,129 (20%), and in 1963 1,109 (18.5%) calls were made after 10.30 a.m. All these figures pertain to late visits made and do not take into account those times when advice was given and the visit made next day. There are no figures with which to compare our late call rate, but it would appear to be excessively high.

Night Calls.—In 1960 we kept an accurate note of visits made between 8 p.m. and 8 a.m. These are set out in Table V, and follow the same apparently excessive demand. Unfortunately the number of these involving maternity work was not recorded throughout the year, but in January three of the 25 calls were for confinements and in February two out of 20. No agreement seems to have been reached on what constitutes a night call, but no matter what definition is used I cannot accept the conclusion of Fry *et al.* (1962) that "night calls which got the doctor out of bed were infrequent, averaging no more than two a month." This conclusion was the result of a survey of 33 practices conducted by "good general practitioners . . . within 50 miles of London." In our practice during 1960

TABLE VI.—Comparison of Night Calls per 1,000 Patients per Annum

	8 p.m.–7 a.m.	8 p.m.–8 a.m.	Midnight–8 a.m.	11 p.m.–8 a.m.
Present review ..	56	59	23	33
Fry (1952)	25	—	—	—
Baekett <i>et al.</i> (1954)	—	39	—	—
Brotherston and Chave (1956) ..	—	19	—	—
McVie (1959) ..	—	84	25	—
Ashworth <i>et al.</i> (1963)	—	18	—	—
Brotherston <i>et al.</i> (1959) ..	—	—	12	17

each of us answered, on an average, 3.5 night calls, between midnight and 8 a.m., each month. The definition of time for the purpose of night calls has varied from observer to observer. In order to compare our figures with those already published our calls are reduced to the number per 1,000 patients at risk for the various periods used by others as defining night calls. The results are given in Table VI. The only figures which compare at all with ours are those of McVie in another Scottish practice. Again I should like to know why there should be this difference in the frequency of night visits.

Surgery Attendances

Despite an overall increase in the practice size of 17.7% between 1957 and 1963, the number of surgery attendances has decreased by 3.3% during this time (see Table II), and the ratio of patients attending surgery to the total at risk shows a steady decrease (Table VII). (Again it may be of interest to note that the two lowest attendance rates are for the years 1962 and 1963, when we have had an appointment system for all surgery consultations.) Fortunately a considerable number of papers have been published with similar statistics, and a comparison of these figures and others obtained by personal communication with our own is shown in Table VIII. The amount of extra work done in Scotland is not at first apparent from these figures, although it is significant that four of the first five placings in the "league table" are occupied by Scottish practices. The difference, however, is more striking when two other factors are considered—namely, (1) the consultation rate per patient per annum, and (2) the ratio of surgery consultations to home visits.

TABLE VII.—Number of Surgery Attendances Per Patient

Year	1957	1958	1959	1960	1961	1962	1963
No.	3.7	3.5	3.5	3.5	3.3	3.0	3.1

TABLE VIII.—Comparison of Surgery Attendances in Various Practices

Source	Country	Population at Risk	Total Surgery Attendances	Rate/Patient
Scott and McVie (1962)	Scotland	3,986	19,252	4.8
Mair and Mair (1959) ..	"	17,896	68,681	3.8
Present review ..	"	39,085	131,773	3.4
Hogg (1963) ..	"	12,511	35,315	2.8
Ashworth <i>et al.</i> (1963) ..	England	11,576	33,103	2.8
Baldwin (1959) ..	Scotland	2,200	5,773	2.6
Pinsent (1950) ..	England	3,200	7,738	2.4
Yellowlees (1963) ..	Scotland	3,600	8,604	2.4
McGregor (1950) ..	"	2,486	5,749	2.3
Weller (1963) ..	England	2,948	5,755	1.9
Crawford (1954) ..	Ireland	2,725	4,702	1.7

Consultation Rates

In the seven years under review our consultation rates varied from 7.1 to 5.7 (Table I). The rate has shown a steady decrease each year except one from 1957 to 1963, but is still high compared with others. This is shown in Table IX. I feel

TABLE IX.—Comparison of Consultation Rates in Various Practices

Source	Country	Consultation Rate
Scott and McVie (1962) ..	Scotland	7.2
Scott <i>et al.</i> (1960) ..	"	6.6
Present review ..	"	6.5
Yellowlees (1963) ..	"	6.2
Mair and Mair (1959) ..	"	5.5
Baldwin (1959) ..	"	5.1
Backett <i>et al.</i> (1954) ..	England	5.1
Hogg (1963) ..	Scotland	5.0
McGregor (1950) ..	"	4.9
Ashworth <i>et al.</i> (1963) ..	England	4.2
Logan (1953, 1956, 1960) ..	"	4.2
Pinsent (1950) ..	"	3.3
Fry (1952) ..	"	3.3
" (1957) ..	"	3.3
Crawford (1954) ..	Ireland	3.2
Weller (1963) ..	England	3.1

that no comment is necessary on these findings. Scotland's place at the top of the league, and the extraordinary range of goals scored, are obvious at a glance. It is, however, interesting to note Weller's comment which accompanied the publication of his figures. "In my opinion these figures represent the maximum demand that should be made on a general practitioner." While agreeing with him, I certainly envy his position in the "relegation zone."

Ratio of Surgery Attendances to Home Visits

Eimerl (1960), in his paper on the keeping of records, noted that in general-practitioner investigations outside England (McGregor, 1950; Crawford, 1954; Watson, 1958) the usual surgery-attendance/home-visit ratio was altered in favour of home visits, many more patients being visited in the home than is usually the case in England. This fact has been verified to a large extent by my findings. Only Scott and McVie (1962) and Mair and Mair (1959) record significantly higher surgery-attendance rates when compared with their home-visit rates. Baldwin's (1959), Marjory Hogg's (1963), Yellowlees' (1963), and our own figures show this high proportion of home visitation recorded earlier by McGregor (1950) and Watson (1958) in two other Scottish practices. Again one would like to know the reason for this difference. As Lees and Cooper (1963) point out, two identical consultation rates may conceal wide variations in the amount of work involved if the proportion of home visits to surgery consultations is not taken into account. They also state that, from the limited evidence they have, a home consultation takes between two and three times as long as a surgery consultation.

Discussion

The purpose of this paper was to study the work done in one general practice and to make comparisons with the work done in other practices in various parts of the country. No attempt has been made to correlate this with morbidity. This has been deliberate. I would agree with Lees and Cooper (1963) when they advise investigators to make up their minds at the outset whether they are studying work or morbidity, as little but confusion can come from attempting both at the same time. They are distinct and separate subjects.

Therefore, only work studies have been compared, and the result of the comparisons is very striking. It may be crudely summarized by stating that the work done by general practitioners in Scotland would appear to be greater than that undertaken in England. This seems to be true for all aspects of work. The demand for home visits is greater, the number of revisits is greater, night calls occur more frequently, and surgery attendances are higher, although in the latter two the difference between the two countries is not so marked as in the other factors. There is also a tendency for the ratio of surgery attendances to home visits to be altered in favour of home visits in Scottish practices.

It is not at all easy to explain why these differences should appear in such a small island as this, but some attempt must be made to answer the question.

Is the generally accepted idea of the Scot being brawny, resilient, industrious, and independent a false conception or is the national temperament changing because of prolonged industrial depression? Indeed, is the reverse true? Is absenteeism from work higher in Scotland than in England? And, if so, could this account in some way for the economic differences between the two countries? Does a high sickness rate, if in fact that exists, discourage industry from coming to Scotland?

Or could it be that the whole concept of family doctoring is different in Scotland? And, if it is, which is the best for the patient? Is the mortality rate of general practitioners

in Scotland higher than that in England? How many Scottish practitioners reach pensionable age? Are there any differences in the supervision of patients by the hospital and public health services? Is more work undertaken by the hospital casualty department and the district nurse than is the case in Scotland? Is the admission to hospital of acute medical emergencies sought more often in the South? In short, is the general practitioner in Scotland more easily available to his patients, and do they take advantage of this? Scott *et al.* (1960) touch on this point when they note that, "because of the freedom of access to a personal medical attendant which has been granted to the whole nation by the provision of a National Health Service, the family doctor is more exposed than any other medically qualified person to a request for assistance." The freedom of access has certainly been granted to the whole nation. The question is, Have only the Scottish people realized this, or are only Scottish doctors fulfilling their entire responsibility?

Whatever the answers to these moral and economic questions, one fact is inescapable. The doctor practising in Scotland—and most are Scots—is suffering financially. Mair and Mair (1959) conclude that efficient service to patients increases their demands and requires increasingly large expenditure of time and money. It is sad to note that they have to rely on additional income from other sources to subsidize the service they give to their patients. Others are not so fortunate. Lees and Cooper (1963) concluded that, taking the consultation rate as an index, the amount of work done for a given income varies widely between practices. They also concluded that discord has tended to centre on what is a fair and reasonable average income for the general practitioner, but that average, they point out, is a fiction, and the methods of distributing whatever total sum has been negotiated have given rise to discontent within the profession. They believe this discontent to be well founded, and suggested that it may be that it is the very lack of knowledge between work and income which has enabled the capitation system to survive unmodified for so long. I would agree with their findings and support their suggestion that the need for reform is obvious and urgent. The information upon which this reform must be based should be provided by the deliberations of the recently constituted Working Party which will inquire into "matters relevant to the work of the general practitioner in the National Health Service." How this is going to be accomplished is difficult to foresee. The only persons who can supply the evidence required are general practitioners themselves. To have the time to do this they must have all necessary ancillary help—both nursing and secretarial. Could the answer lie in the establishment of a new grade of male medical ancillary trained in these two functions?

Only when all these data are collected and assessed will we have a solid foundation on which to build the future health service. It is to be hoped that then the disorganization of the first sixteen years of the Health Service will soon be forgotten by a reinvigorated and contented profession, and the questions posed in this paper answered.

ADDENDUM.—After submitting this paper for publication I received the following figures for the year 1963 from Drs. R. M. Duncan and A. M. Orcharton, general practitioners in Kilmarnock, Ayrshire. During that year their practice size was 5,150, 14,186 home visits were made, and 13,181 surgery consultations given. This is equivalent to a consultation rate of 5.3 per patient per annum—2.7 of these being made in the

home and 2.6 given in the surgery. These figures entirely support the conclusions drawn in this paper.

Summary

Some of the work done in one Scottish practice over a period of seven years is described and compared with the work undertaken by others. It would appear that the general practitioner practising in Scotland is doing more work than his counterpart in England. A few of the implications of this are discussed without arriving at any conclusions, apart from the fact that the Scottish general practitioner is probably suffering financially. It is suggested that an urgent investigation into all aspects of general practice is required in an effort to find an answer to these and other problems. Ancillary help, both nursing and secretarial, must be made available to enable general practitioners to provide the data required.

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