

## WORK LOAD IN GENERAL PRACTICE

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ALTHOUGH SEVERAL STUDIES HAVE ALREADY been made on this subject, e.g. Bradford Hill (1951), Fry and Dillane (1964), College of General Practitioners (1965), our information is far from complete, and this quantitative study in a relatively large list, outer suburban London practice may fill some of the gaps. At the same time the value to me has been to highlight the inefficiency of conventional practice organization, and the need for a new type of study to enhance our knowledge of the nature and content of general practice as distinct from its amount.

### The practice

This is a two-partner practice in the predominantly middle-class suburb of Edgware. It is almost entirely N.H.S. At the time of the survey a part-time assistant did three sessions a week and for some of the time, there was a trainee assistant. The amount of time shown is that actually devoted to the practice by all the doctors, the time spent by the trainee in 'sitting in' and non-productive effort being discounted.

The organization was conventional morning (six days a week) and evening (five days a week) surgeries with the addition of four afternoon sessions viz. antenatal, children and one appointment session for each principal. A full-time receptionist and caretaker are employed.

### The method

Two phases of study were undertaken:

1. For the period 1 September 1964 to 30 August 1965, every tenth record card was removed in September 1965 from the files, and the quantity of work in relation to the age and sex of a patient was calculated. It is suggested that age/sex distributions for other types of research can be readily obtained in this way, where a register has not been established.

2. For the period 6 September 1965 to 4 September 1966, a standard form was completed each day by each doctor. The form was designed so that, by simply crossing off numbers, the doctors could show the numbers of various items of service, and the periods of time at work each day, enabling weekly figures to be calculated readily.

### The results

#### *Phase 1*

Table I shows the results of this study. It will be noted that by reviewing every tenth card, a total of 689 was analysed. It is believed that this is reasonable; the official list size on 1 July 1965 was 6,359, and the list variation during that quarter was insignificant at 0.6 per cent. There is a 10-11 per cent annual turnover in this practice and a card is filed

TABLE I  
TOTALS

	Number reviewed	As percentage of patients reviewed	Total number of items of service	Average number of items per patient	
				Reviewed	Corrected
<i>Males</i>					
<1 .. ..		0.87	36	6.0	6.48
1 to 5 .. ..	47	19	154	8.1	8.75
6 to 10 .. ..		22			
11 to 20 .. ..	53	7.69	194	3.7	4.00
21 to 30 .. ..	38	5.51	123	3.0	3.24
31 to 40 .. ..	39	5.66	117	3.0	3.24
41 to 50 .. ..	55	7.98	203	3.7	4.00
51 to 60 .. ..	41	5.95	189	4.6	5.00
61 to 70 .. ..	31	4.50	180	5.8	6.26
71 to 80 .. ..	12	1.74	60	5.0	5.40
81 to 90 .. ..	1	0.14	3	3.0	3.24
MALE TOTALS ..	317	46.00	1,410		
<i>Females</i>					
<1 .. ..		0.44	16	5.3	5.72
1 to 5 .. ..	66	38	266	7.0	7.56
6 to 10 .. ..		25			
11 to 20 .. ..	51	7.40	210	4.1	4.43
21 to 30 .. ..	63	9.14	262	4.1	4.43
31 to 40 .. ..	50	7.26	185	3.6	3.89
41 to 50 .. ..	47	6.82	191	4.0	4.32
51 to 60 .. ..	48	6.97	200	4.2	4.54
61 to 70 .. ..	33	4.75	227	6.9	7.45
71 to 80 .. ..	11	1.60	98	8.9	9.61
81 to 90 .. ..	3	0.44	28	9.3	10.04
FEMALE TOTALS	372	54.00	1,831		
GRAND TOTALS	689	100.00	3,241		

immediately on registration, although removals take several months to become effective. This counter-balances the fact that, *pro rata*, cards were reviewed which did not represent a whole year's work. The total number of items is therefore relevant, but has to be corrected (in the last columns) to relate to the number of patients. The total number of items was 3,241 representing an annual number of 32,410. To this should be added 282 items performed by outside doctors on rota, and not entered on records, giving a total of 32,692 (exclusive of a certain number of unrecorded items of service by telephone) giving a figure of 5.1 items per patient per year.

Table II shows the spread of numbers of items per patient in one year. By adding the figures in the range of 16 items per year and over, it will be seen that 5.65 per cent of patients have 24.39 per cent of all items.

TABLE II  
SPREAD OF ITEMS IN RELATION TO PATIENTS. (ONE YEAR OF SURVEY)

<i>Item range</i>	<i>Total number of items</i>	<i>Accumulative</i>	<i>Percentage of all items</i>	<i>Number of patients</i>	<i>Accumulative</i>	<i>Percentage of patients</i>
0	0	0	0	167		24.24
1 to 5	907		27.99	316		46.00
6 to 10	870		26.84	114		16.54
11 to 15	674		20.79	53		7.60
16 to 20	533		16.44	30		4.35
21 to 25	111	} 257	7.95	5	} 9	.71
26 to 30	27			1		.14
31 to 35	66			2		.29
36 to 40	0			0		0 1.30
41 to 45	0			0		0
46 to 50	0			0		0
51 to 55	53			1		.14
TOTALS	3,241		100.00	689		100.00

### Phase 2

These have been collated on the basis of four weekly time intervals commencing 6 September 1965. Table III gives the results on a four-week basis showing in column 3 the total number of items of service, in column 4 the total time taken in dealing with the practice including administra-

TABLE III  
TOTAL WORK LOAD 1965-1966

Month i.e. four weeks beginning	Time on call (hours)	Total no. of items of service	Total practice time (hours)	Total practice patient time (hours)
6/9/65 ..	408	2,639	389½	357½
4/10/65 ..	310	2,934	431	389½
1/11/65 ..	337	2,865	466½	435½
29/11/65 ..	267½	2,953	421½	397½
27/12/65 ..	362	2,683	455½	443½
24/1/66 ..	315	3,273	523	505½
21/2/66 ..	344	3,190	501½	488
21/3/66 ..	300	2,622	419½	409
18/4/66 ..	378	3,024	458½	448
16/5/66 ..	319	2,944	456	447½
13/6/66 ..	406	2,817	460½	443½
11/7/66 ..	301½	2,502	389½	379½
8/8/66 ..	319	2,273	383½	379½
TOTALS ..	4,367	36,719	5,756	5,532

tions, and in column 5 time in direct patient contact, or dealing with direct patient matters.

Time taken in dealing with other medical matters (e.g. reading journals, attending clinical meetings, attending medicopolitical meetings), is excluded. I estimate that in addition to one whole week per year on a postgraduate course, I devote an average of 1-2 hours a week to professional reading and 4-5 hours a week to professional meetings, clinical and otherwise. The mean list size over this year was 6,479. With a total number of 36,719 items of service, there is an average of 5.66 items per patient in the year. This is consistent with the findings of phase 1 as it includes a count of telephone conversations not counted in phase 1 and would suggest a possible slight increase in work load per patient, although there was an increase in practice size of 181 during the year.

These numbers of items of service took 5,532 hours of work in contact with the patient suggesting an average of nine minutes each for all types of service, and represents an *average* working week in the practice per principal of over 53 hours, in a 52 week year, or 57 hours for each of 48

working weeks, plus 42 hours a week on call.

In table IV a comparison is made between the actual hours worked by each principal and his spread of hours. This table has been limited to every fourth week. Column 4 represents the actual hours worked in the week; column 5 represents the total number of hours in the routine working days in that week, i.e. from leaving home in the morning to arriving home after the last session of the day. It does not include over-night and weekend rota duty, but is in effect the span of routine working days in that week being compounded of the actual work done plus the short, usually unusable, periods of the time between each phase of activity. Column 5 gives the excess of column 4 over column 3.

### Discussion

In general we are entering a critical phase in the development of general practice. Two big questions will have to be answered before the viability of general practice can be determined. The first question is what form of organization will be best adapted to the needs of the new general practice? The medicopolitical aspects of this question are outside the scope of this article, but some evidence can be derived (e.g. table IV) that conventional surgery hours are too rigid and time-wasting to deal with a situation in which there are marked variations in day-to-day demand.

I have concluded that a practice of this size is too demanding for two principals (I acknowledge that in the two years under survey the principals have had appreciable relief from assistants) and although it will be slightly under national average in patient-doctor ratio, we are converting to a group practice of three with various sessions interchangeable between doctors. The prospective form is shown in table V. These sessions will be mainly by appointment, but a short period will be available morning and evening for those patients unable to make appointments. The individual doctor's spread of hours will be reduced and yet he will have more time to devote to his patients under quieter conditions and with less pressure. Where there is a gap in the working day it will be of the order of 3-4 hours which can be put to use. Moreover, it is anticipated that the length of sessions can be varied if required to meet variations in demand, due either to absence of a partner or seasonal variations.

The second question is whether the general practitioner can improve his professional status to the point where he can and does practise effective scientific medicine in a situation in which knowledge is increasing at a rapid rate.

In order to do this it would seem that quantitative surveys of the type described here are obsolescent, and should be replaced by qualitative surveys. What we want to know is the nature, scope and content of general practice: How does the general practitioner devote his time to the various aspects of medicine? How deeply is he involved in each? Could he enhance his status by devoting more time, or gaining more knowledge in any particular aspect? What is, and will be the impact of the general practitioner's attitudes on his colleagues in the hospital and public health fields? Above all, how much of his time is really wasted on the trivial? Could some of this be relieved by professional ancillary help? How much

TABLE IV  
COMPARISON OF TOTAL WORK DONE WITH SPREAD OF HOURS IN ROUTINE DAY

<i>Week</i>	<i>Doctor</i>	<i>Comment</i>	<i>Total work done</i>	<i>Spread of hours in routine day's work</i>	<i>Excess column 5 over 4</i>
4	A		40	50½	11½
	B		42½	52½	10
8	A	B absent all week on course	51½	55½	4½
	B				
12	A		41½	49½	8½
	B		47½	47½	½
16	A	Week includes Christmas break	33½	47	13½
	B		32½	39½	7½
20	A		50	53½	3½
	B		41½	50½	9
24	A		49	53½	4½
	B		41½	48	6½
28	A		48	48	0
	B		40½	48½	8½
32	A	Week includes Easter Monday	37½	41½	4½
	B		36	43	7
36	A		42½	53	10½
	B		45½	49	3½
40	A		43½	50	6½
	B		38½	52	13½
44	A	A absent part of week on professional business	13½	15	1½
	B		45½	54½	9
48	A	B absent all week on holiday	50½	60½	10½
	B				
52	A	A absent all week on holiday			
	B		41	48½	7½

N.B. Column 4 includes actual time working while on rota, which includes time outside routine working day. All time given in hours.

TABLE V  
PATTERN OF PRACTICE PROJECTED FOR GROUP OF THREE

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
morning session 8.45 to 12 or 1	B C A visits B and C complete visits if busy	A C B visits A and C complete visits if busy	A B C visits A and B complete visits if busy	B C A visits A and C complete visits if busy	C A or B A or B visits A or B and C complete visits if busy	C A B visits C and A complete visits if busy
after-noon session 1 to 4	A	B 3.30 p.m. antenatal	—	C	11.30— children C + A or B, no appointments A or B	—
evening session 4 to 7	B C	A C	—	A B	C A or B N.B. A and B alternate on Fridays, either morning and evening or after-noon appointments	—

There are many alternative combinations.

of the so-called trivial is really the untapped evidence of functional ill-health?

It is suggested that these questions involve a good deal of subjective thought. A survey of this type would require an experienced outside observer to spend at least one week with the doctor concerned. For the results to have meaning an adequate number of appropriately selected practices would have to be surveyed. In view of the importance of this subject, is it too much to ask that it should be properly undertaken and financed?

#### Summary

A quantitative survey by two different methods over two years of the work load in an outer suburban general practice, is described. A plea is made for the undertaking of a qualitative survey, and alterations in the organization of the practice resulting from the author's impressions during the survey, are described.

#### Acknowledgements

I wish to acknowledge the help of my colleagues in collecting the data namely Doctors A. B. David, Margaret Tappin, Phiroza Tavadia, and I. K. Strausz.

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### CLINICAL NOTE

#### AN UNUSUAL CASE OF ANAEMIA WITH NEUROLOGICAL AND PSYCHIATRIC FEATURES

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A WOMAN OF 24 YEARS was admitted to British Military Hospital, Dhekelia on 15 October, 1963 with a history of lassitude and amenorrhoea for two months. No other symptoms were admitted even on direct questioning of the patient and her husband. Her mother died at the age of 52 years in 1959 of pernicious anaemia which apparently had been treated for four years. On examination her colour was pale but without any yellowish tinge. Her tongue was not painful or atrophic. The spleen was palpable. There was no enlargement of lymph glands. There was weakness of both legs, the right knee jerk was diminished, the left knee jerk and the ankle