INDIVIDUAL STUDY

Twenty-one years of general practice —changing patterns

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THE form and character of medical care are never static. There must be constant change to adapt to new medical and social situations. Planning for the future should be based on a continuing evaluation of data to ensure the best use of available resources.

General practice, or primary medical care, is an essential part of any system of health care. Its form may be influenced by local and national philosophies but it must be present otherwise the other parts of the health services are unable to function effectively.

Since the introduction of the National Health Service in 1948 there have been some major changes in the organisation of general practice. More changes are projected for the future. If these are to be beneficial to the public and the profession, recent developments in general practice during this period should be taken into account. A review of 21 years work in one general practice is presented to stimulate discussion.

The practice

The practice is over 50 years old and I began single-handed 25 years ago. It is now a two-man practice supported by a nurse, health visitor, midwife and secretary-receptionists. The area is a middle-class South-east London suburb about ten miles from the centre of the city.

Since 1947 continuous records of work patterns have been kept. The 21 year period 1951–1972 has been selected for review and analysis to allow for the introductory period in the early days of the National Health Service.

Standard records are available for the population at risk; the changes in personnel and methods within the practice; the work load; the use of hospital facilities; and the attendance rates for the main clinical groups.

Data for practice population were available for all the patients registered with the practice through the National Health Service. There have been virtually no private patients.

The work carried out by the general practitioners has been recorded by doctor-patient consultations in the consulting room and at home visits.

Records have been kept of all referrals for direct radiological or pathological investigations and also of all those referred to hospital specialists for outpatient consultation or admission.

Details of the clinical diagnosis were made by classifying the general practitioners' work into clinical groups. This was done to help recording. It was not possible to record and analyse all attendances with the *International Classification of Disease.*

Results

Practice population

The population at risk during the period under review is shown in table I. Two general practitioners can care for almost 9,000 people as there is a partnership with two other

practitioners with relatively small lists and therefore there is a maximum allowance of up to 4,500 per doctor. Nevertheless it has been possible for two doctors to provide a good standard of care.

TABLE I

PRACTICE POPULATION 1951–1972

Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	
Practice population	4400	4658	5065	5411	5551	5741	5853	6365	6663	6801	
Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Practice population	7082	7578	7843	7831	7902	8241	8480	8784	9022	9020	9007

Work patterns—consultations and home visits

The rates for consultations and home visits are shown in table II measured by the average attendance rates per person per year.

TABLE II

WORK PATTERNS—CONSULTATIONS AND HOME VISIT RATES PER PERSON PER YEAR

Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Consultations	2·7	2·5	2·5	2·4	2·6	2·7	3·1	2·9	2·8	3·0
Home visits	0·6	0·7	0·7	0·7	0·7	0·8	0·8	0·7	0·8	0·7
Total	3·3	3·2	3·2	3·1	3·3	3·5	3·9	3·6	3·6	3·7

NOTE: 1951–5 : one doctor. 1955–1961 : two doctors.
1960–1972 : two consulting rooms

Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Consultations	3·2	3·0	2·7	2·7	2·5	2·6	2·5	2·2	2·2	2·2	2·0
Home visits	0·6	0·6	0·6	0·5	0·3	0·4	0·4	0·2	0·1	0·1	0·1
Total	3·8	3·6	3·3	3·2	2·8	3·0	2·9	2·4	2·3	2·3	2·1

NOTE: 1961–3 : Three doctors. 1963–1970 : two doctors
1962–1972 : Full appointment system
1962–1972 : Health visitor attached
1968–1972 : Practice nurse

Some trends can be noted. First, there has been an overall reduction of work during the 21 years, particularly with home visits. It has also occurred with consultations.

Secondly, the changes were related closely to external influences. The work-load increased when extra doctors were first introduced into the practice in 1955–1959, when the first assistant was employed, and in 1960–1963 when three doctors worked in the practice. The work-load began to decrease from 1963 when a full appointment system was introduced, when a health visitor was first attached and when more secretarial-receptionist staff were employed.

Thirdly, since 1964 there have been active and positive efforts to reduce unnecessary work. Patients were encouraged to come to the consulting rooms rather than receive home

visits. Revisiting by the doctors was reduced and some delegated to the practice nurse and health visitor. The number of visits they carried out were 500–600 per year. [0·05 per person].

Better methods of care, for example, better antibiotics for infections, better diuretics for congestive cardiac failure, better drugs for the management of asthma, arthritis, depression, anxiety and skin conditions have all made it possible to reduce the number of times patients have to be seen.

TABLE III

WORK PATTERNS—CONSULTATIONS AND HOME VISITS PER DAY, SESSION, AND WEEK FOR EACH GENERAL PRACTITIONER

Year	*Practice total per working day*		*Daily total per general practitioner*			*Weekly total per general practitioner*	
	Consultations	*Home visits*	*Consultations*	*Home visits*	*Per consulting session*	*Total consultations and home visits*	*Hours per week in contact with patients*
1951	40	9	40	9	24	285	39·3
1952	39	10	39	10	23	280	
1953	42	11	42	11	25	305	
1954	44	9	44	9	24	309	43·0
1955	47	9	31	6	24	275	
1956	53	11	35	7	26	275	
1957	60	14	40	9	30	260	
1958	62	13	42	9	25	270	
1959	65	15	44	10	26	275	
1960	69	15	35	8	20	250	
1961	76	14	30	5	21	250	
1962	77	14	30	5	21	245	
1963	71	15	35	8	19	235	
1964	71	11	35	5	19	235	
1965	65	10	33	5	17	235	
1966	72	10	36	5	19	230	
1967	71	11	35	5	17	225	
1968	66	6	33	3	16	225	
1969	67	5	34	2	16	220	
1970	65	4	33	2	16	215	27·1
1971	61	3	30	2	15	210	

For many reasons the work-load in the practice has been reduced appreciably during the 21 years. Overall, there has been a 46 per cent reduction from the peak to now and an 87 per cent reduction in home visits with a 31 per cent reduction in surgery consultations.

Work patterns—per session, day and week

Alternatively, it is possible to calculate the amount of work as shown by the number of consultations and home visits per doctor during each week, each day, and at each working session (table 3).

The total work in the practice reached its peak in 1960–63, but has fallen since. Personally, I was busiest in the 1950s and I am now seeing almost 100 fewer patients per week than at my peak in 1954 for almost the same number of people at risk.

The number of consulting sessions per week has risen from ten in 1951 to 25 in 1971. All are now by appointment and five are special clinics including antenatal and child care.

What is not shown in the table and what has made life much easier for me has been the rota system with another group for night and weekend work. With the appointment system, I now finish my practice work by 1800 hours instead of 2000 or 2100 hours, as in the pre-appointment period.

My life in general practice is now very much easier, more planned and controlled, and less stressful than 20 years ago. I believe that I am providing a much better service for my patients.

Other work, outside the practice, was carried out during this period. During 1951–1960 two, weekly sessions, as a hospital clinical assistant, were undertaken and since 1960 at least one day per week has been spent on a variety of extra-practice professional activities (figure 1).

DAY	MORNING		AFTERNOON		NIGHT
	08.30–11.30	11.30–13.00	14.00–15.00	15.30–17.30	17.30–07.30 next day
MONDAY	Consultations	Home visits	Antenatal clinic	Consultations	FREE
TUESDAY	Consultations	Home visits	Child care clinic	Consultations	ON CALL
WEDNESDAY	Consultations	Home visits	Consultations*	Consultations*	FREE
THURSDAY	FREE DAY				FREE
FRIDAY	Consultations	Home visits	Consultations	Consultations	ON CALL one in four
SATURDAY	Consultations*	Home visits ON CALL ONE IN FOUR			
SUNDAY	ON CALL ONE IN FOUR				

* Some weeks only

Note: In addition about three to four hours a week are spent on administration including letter writing

Figure 1. Timetable.

Referrals to hospital

The referral system to hospital specialists makes the British general practitioner an important influence on the number of people treated in hospital. During 1951–1972 the rates of hospital referrals fell in this practice by one half (table IV) (Fry, 1971).

TABLE IV

HOSPITAL REFERRALS PER 100 PATIENTS 1951–1972

Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	
% patients referred to hospital	*10·5*	*10·3*	*9·0*	*8·7*	*8·5*	*8·3*	*7·5*	*6·5*	*6·5*	*6·7*	
Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
% patients referred to hospital	*7·2*	*6·6*	*6·0*	*5·2*	*5·0*	*5·5*	*5·0*	*5·0*	*4·8*	*5·2*	*4·0*

Referral for radiography and pathology

Full access to direct radiography and pathology have been available at local hospitals. The rates of referral shown in table V show fairly constant levels during the 21 year period.

TABLE V

RADIOGRAPHY AND PATHOLOGY REFERRALS PER 100 PATIENTS

Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	
Radiography	6·9	5·9	5·9	5·5	6·0	7·2	5·2	5·5	6·7	6·2	
Pathology	5·7	5·1	5·4	6·9	8·2	5·8	5·4	4·5	5·9	5·5	
Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Radiography	8·3	7·4	7·1	5·3	6·0	6·1	5·3	4·7	6·1	6·0	5·5
Pathology	8·2	6·6	6·4	5·5	5·6	8·8	5·8	6·1	6·4	6·8	6·2

Clinical groups

The attendances for various clinical groups and the rates of attendance for 13 selected groups of conditions were calculated for each year (table VI).

There were falls in rheumatic, gastro-intestinal, cardiovascular, central nervous system, respiratory and dermatological groups. There were increased rates of attendance for obstetric, gynaecological and immunization groups. No marked changes were noted in upper respiratory infections, psychiatric, ear, nose and throat, and urological conditions. Dramatic psychosocial emergencies have all but disappeared.

It would appear that the main reduction in work has been with the degenerative conditions associated with ageing and that increase in work has occurred with those groups in which positive preventive activities have been a feature. It is of interest that the rates of attendance for psychiatric conditions have remained constant in spite of the advent of the newer psychotropic drugs.

Discussion

It is agreed that general practice or its equivalent is an essential part of our National Health System. It is also accepted that our general practitioners should continue as personal and family doctors acting as generalists. To provide good care on a continuing basis, the general practitioner must have the right tools, including education, premises and staff and access to diagnostic and therapeutic facilities at local hospitals.

General practice is a highly personal field and the individual doctor should be free to

TABLE VI

ATTENDANCE RATES PER 100 PATIENTS BY CLINICAL GROUPS

	Rheumatic	*Gastro-intestinal*	*Cardio-vascular*	*Central Nervous System*	*Respiratory*	*Upper Respiratory Infections*	*Pregnancy*	*Gynaecology*	*Skin*	*Psychiatric*	*Immunizations*	*Ear, Nose and Throat*	*Urological*
1951	22·7	27·3	12·8	9·0	22·7	36·3	7·7	8·0	26·1	29·5	3·9	14·8	4·8
1952	23·4	36·2	21·3	8·1	30·8	48·5	6·8	6·5	30·7	30·7	4·2	15·9	6·5
1953	21·0	28·0	18·0	12·0	30·0	66·0	7·5	7·0	30·0	30·0	5·0	18·0	5·0
1954	24·1	29·9	18·5	15·5	23·7	41·0	7·5	7·5	31·5	23·5	7·7	16·7	5·6
1955	22·5	30·4	17·9	13·4	25·0	50·0	7·5	7·3	31·2	23·0	9·0	17·9	7·3
1956	27·5	33·3	21·8	13·2	30·0	54·2	10·5	7·0	33·3	27·3	8·7	17·5	7·0
1957	27·1	30·5	23·6	13·6	30·5	71·2	9·3	9·3	33·6	30·5	16·0	16·8	6·8
1958	28·1	28·1	26·5	12·5	26·8	51·5	9·4	7·8	32·8	28·1	32·5	16·2	6·3
1959	26·9	31·4	25·3	11·2	29·9	55·2	11·8	11·0	35·4	23·8	25·2	17·7	6·5
1960	32·3	36·8	26·5	13·3	28·0	45·6	13·3	13·5	33·0	32·3	31·0	22·1	5·8
1961	30·0	35·5	25·5	14·3	22·5	50·0	17·7	13·5	33·0	34·0	31·5	18·5	8·6
1962	27·8	32·8	26·3	11·8	27·5	42·1	17·0	11·8	29·0	30·5	29·0	18·4	8·0
1963	24·3	32·1	21·2	10·3	28·2	47·5	15·4	10·5	27·0	30·8	14·2	19·3	6·5
1964	27·0	29·5	23·0	14·1	23·0	35·8	15·6	12·8	28·3	32·3	11·6	18·0	6·6
1965	22·8	27·8	19·0	10·5	22·8	43·4	15·2	13·3	27·0	25·8	10·5	17·8	6·7
1966	23·2	29·5	18·3	9·7	22·4	41·4	15·0	15·0	24·3	28·0	18·3	18·3	7·5
1967	22·3	23·5	16·5	9·4	20·0	35·3	14·4	13·0	24·8	30·6	9·5	15·3	5·9
1968	20·5	20·6	14·2	8·0	17·3	30·7	10·2	14·0	20·5	28·3	9·7	15·3	5·6
1969	20·0	21·2	11·2	7·2	16·6	33·3	10·5	11·2	22·2	26·7	8·8	15·6	5·6
1970	19·0	19·0	10·0	9·9	15·6	27·8	11·2	11·3	20·0	25·6	11·2	14·5	5·6
1971	18·9	20·5	10·0	7·8	14·5	27·8	10·2	12·2	16·6	26·7	14·0	12·5	6·1

plan and organise his work as he feels best for his patients. Nevertheless there are many common features and even a highly personalised review of one practice in one area by one particular, and perhaps peculiar, general practitioner may pose questions for the future.

This review of 21 years in one practice raises some fundamental queries which suggest some long held beliefs should be reviewed.

It is clear that in this particular practice it is possible for two practitioners to cope with twice as many patients as average in ways that, apparently, are satisfactory to both patients and doctors. If this is so in one practice, is it possible in others?

The volume of work in the practice, by several measurements, has fallen considerably during the 20 year period. This has been particularly noteworthy in the home visiting role which has been reduced eight-fold.

Among many factors the most important have been the organisation of the work and the attitudes of patients, doctors and staff, who through collaboration and co-operation have made it possible for the same number of doctors to care for more people.

The increased work in the preventive field suggests that the National Health Service is making it possible for general practice to move towards a *health* service rather than a disease service. There were reductions in attendances for the more chronic and degenerative conditions, possibly because of better therapeutic methods or because of changing attitudes of the doctors in seeing these persons less frequently.

There were no great changes in the rates of use of the diagnostic radiological and pathological facilities but there was a remarkable two-fold reduction in the rates of referrals to hospital specialists including domiciliary consultations. Perhaps with more experience, more confidence and better therapeutic resources the general practitioners are better able to cope with the more serious diseases outside hospital?

The major question is how many general practitioners are needed in the future? Have we perhaps a surfeit now? Should we be trying to induce more and more young doctors to enter general practice?

These are important national and public issues that can be answered only by a much larger national analysis and studies of the work patterns of both general practitioners and of hospital specialists as well.

Before this study is dismissed as biased and irrelevant because it is from one single practice, the findings in other practices of work patterns as shown in *The Report from General Practice No.* 13 (1970) should be consulted. Similar trends are shown here. The facts show indisputable changes in this practice; if they can be repeated in others then we may have to revise our manpower policies for the future.

Summary

A review of the patterns of work and care in one general practice in South London over 21 years (1951–1972) raises some fundamental questions on the use of manpower resources in the future.

It has been found possible for two general practitioners to provide sound care for a population of over 9,000—twice the national average.

The volume of work, expressed in annual doctor-patient consulting rates and home visits, has fallen by more than one third during the 20 year period, particularly for home visits. Expressed in another way, the author is now seeing 100 patients fewer and working 16 hours a week less with approximately the same number of patients.

Increases in rates of work are shown for preventive procedures such as immunization, antenatal care, cervical cytology and child welfare, with decreases for degenerative conditions including rheumatic, cardiovascular and central nervous systems and those affecting the skin and the gastrointestinal tract. Referrals to specialists fell by half.

While acknowledging that these findings are those derived from one particular single practice, nevertheless the results merit urgent national studies to test the hypothesis that perhaps there are already enough general practitioners. Similar studies are needed to examine the work-patterns of hospital consultants.

ADDENDUM

The number of patients booked per hour at surgery consultations is as follows:

Normal consultation session	9–10 per hour
Antenatal session	12 per hour
Child care session	12 per hour

Home visits are done at a rate of 4–5 per hour.

Acknowledgement

Since 1960, Dr John B. Dillane has been my partner and colleague and his great help has been gratefully acknowledged.

REFERENCES

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(*See Editorial*).

WEIGHING MACHINE SURVEY IN GENERAL PRACTICE

The practice organisation sub-committee of the East Scotland Faculty of the Royal College of General Practitioners has carried out a survey of weighing machines used in general practice. Information was obtained from 190 doctors in the area.

The lever machines were found to be the most satisfactory and one platform machine by Whites of Auchtermuchty cost £43 and weighed to within an ounce on testing.

It was felt, however, that the spring machines were much cheaper and if checked regularly and renewed often were adequate for general practice.

The Faculty reports that the appropriate City and County Weights and Measures Department "generally are willing to check scales in doctors' consulting rooms free of charge".

South East Scotland Faculty Newsletter (1972). **1**, 8–11.

ACCIDENTAL DEATHS IN CHILDREN

The three commonest causes of accidental deaths in children in 1969 were:

(1) Road accidents. (2) Choking and suffocation. (3) Drowning.