The work of a family doctor

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GENERAL practice is what you make it, but its scope is limited by local facilities which may determine the responsibility that any one doctor should accept. The postgraduate training and the eagerness of the individual are also important.

All doctors practising in this area have access to and clinical control of a well equipped cottage hospital with 32 beds, a separate maternity home of 13 beds and a 48 bed hospital for the aged sick. In addition there are three homes for the indigent elderly.

The nearest hospital with specialist staff is 25 miles away and patients requiring neuro-surgery, thoracic surgery, E.N.T., gynaecological surgery or deep x-ray therapy have to travel about 50 miles to the nearest teaching hospital. It is desirable therefore that doctors practising in this area should be prepared to accept some responsibility for such emergencies as abortions, mycocardial infarctions, and the less severe fractures, lacerations. Thus their work is not comparable with that of a doctor in a suburban area lacking the virtues of isolation and the desirable auxiliary services which permit him or her to exercise to the full their professional training.

During the first complete 20 years of the National Health Service, i.e. from 1 January 1949 to 31 December 1968 there was considerable de-population, particularly in the rural areas of this practice. This complicated the calculations necessary to obtain accurate figures of the number at risk and a further difficulty was the desire to compare the two decades, 1949–58 and 1959–68. This was achieved, however, by counting the number of years and half-years that each patient was registered in the ten different age groups, 0–4, 5–14, 15–24, 25–34, 35–44, 45–54, 55–64, 65–74, 75–84, 85 and over, during each of these decades and the whole twenty years. The final figures are consolidated in table 1.

TABLE 1

NUMBER OF PATIENTS REGISTERED FOR A SHORTER OR LONGER PERIOD IN THE DECADES 1949-58 TO 1959-68

Males		*Females*
1,958	First decade	1,901
1,579	Second decade	1,694

The fluctuations in the number at risk may be appreciated as the total number registered for a shorter or longer period was 2,455 males and 2,414 female patients during these 20 years. The average yearly number was 2,429 and the rural nature of the practice can be judged by the estimated total of well over 500,000 miles travelled during this time.

The work involved

Table 2 shows the number of patients seen during the first and second decades with the home visits and surgery consultations. The days off work or school and the days of invalidism are added. These figures are only relevant where similar facilities are available to the doctor since each patient seen in the cottage hospital, maternity home, when on duty at the hospital for the aged sick, and in the homes for the elderly had a visit recorded for them.

This table shows that, despite the fall in numbers at risk, more patients were seen in the second decade than in the first. There has been a moderate change in emphasis from home visits to surgery consultations but when these are combined the total male

TABLE 2
EPISODES PER 1,000 PATIENTS AT RISK DURING DECADES 1949-58 AND 1959-68

	Number of patients seen	*Number of home visits*	*Number of surgery consultations*	*Days off work or school*	*Days of invalidism*
			MALES		
First decade	7,909	16,221	13,353	35,811	53,401
Second decade	10,062	17,589	16,719	47,791	46,775
			FEMALES		
First decade	10,619	32,584	17,226	17,345	149,570
Second decade	13,583	32,375	21,968	19,391	147,871

demand for attention increased from 29·2 episodes in the first decade to 34·3 in the second, and among female patients the increase was from 49·9 to 54·2. On average, therefore, each patient at risk received some form of medical attention on 61·2 occasions for all the 20 years and it is emphasised that telephone consultations are not included in this total.

This table suggests the need for an aggressive study of community medicine since the number of days off work or school increased by 6,851 days during the second decade. This could have been influenced by the greater affluence of the inhabitants; the introduction by many firms of benevolent funds which subsidised the sick benefits received from the National Health Service, and also public employees receiving the whole or part of their emoluments when off sick. These provisions may have encouraged patients to be completely recovered before returning to duty and this, combined with the availability of more effective medicaments, helped to produce a much needed reduction in invalidism which amounted to 65,468 days.

Family-doctor service

The assessment of the effectiveness of the service which the patient was given is a subject that has received scant attention in every branch of clinical practice. In general practice the number of consultations is no criterion and indeed could be a reflection on the competence or lack of decision or even a lack of interest on the part of the doctor. The days off work or school are of considerable economic importance to the community but as a measure of success it is not the complete answer since it fails to include the 0–4 age group, only some of the female patients are gainfully employed, and there is an increasing number of retired people. The days of invalidism, although subject to the arbitrary decision of the doctor, and of the patient, is suggested as a better method or a combination of the two might provide a more accurate picture. Judged by these standards the figures given in table 2 do not support the much vaunted advances in the medical sciences.

Use of institutions

The proportion of patients referred to a hospital is yet another criterion of the usefulness of a family doctor to the community. In an area such as this with hospital services provided, his or her effectiveness can be further scrutinised by observing the number retained under personal control. Table 3 shows the day use of hospitals during the two decades.

This table shows that the total of institutional treatment increased greatly in the second decade. The increase was from 47,530 to 81,411 days and the only fall was in admissions to mental hospitals. These increases, however, affected mainly local institutions such as the cottage hospital and institutions for the elderly and, therefore, involved personal care.

Of the patients admitted for acute or semi-acute medical or surgical reasons 59·4 per cent were dealt with in the cottage hospital. This was achieved by having assistance from the visiting surgeon who performed operations for interval appendices, herniae.

TABLE 3

USE OF HOSPITAL SERVICES DURING TWO DECADES (1949-58 AND 1959-68) EXPRESSED AS AN AVERAGE INPATIENT DAYS PER 1,000 PATIENTS AT RISK

	Cottage hospital	*Local maternity home*	*Specialist maternity hospital*	*Old folks Home/Hospital for aged sick*	*District specialist hospital*	*Mental hospital*	*Other specialist hospitals*
			MALES				
First decade	3,009	—	—	3,499	1,702	1,981	1,601
Second decade	3,025	—	—	5,028	3,463	1,934	2,024
			FEMALES				
First decade	6,125	1,726	59	2,814	1,948	3,146	2,594
Second decade	10,892	1,933	288	6,682	2,241	2,495	2,858

The total days spent in hospital during the 20-year period:

Cottage and local maternity hospital	47,325
Specialist hospital and specialist maternity hospital	33,010
Mental hospitals	17,144
Aged sick and old peoples homes	31,462
Total days in institutions	128,941

haemorrhoids and Trendelenburg's procedures for varicose veins, while valuable advice was obtained from visiting physicians for myocardial infarctions which were not responding and rarer medical conditions. This work was time consuming but it was accepted with enthusiasm and must have appreciably reduced the pressure for beds in the specialist staffed hospitals.

The decided increase during the second decade in the need for institutional care of the elderly sick and the infirm follows a trend that exists throughout the country. In this area it is not due to the inhabitants being neglectful of their elderly relations. Economic circumstances and the increased demand for female labour undoubtedly played a part in making it difficult to provide adequate attention in the home. Probably a more important factor however, is the attitude of the profession since we are no longer willing to tolerate the elderly infirm being allowed to vegetate in loneliness especially when they live alone. When sick, it is the impression that our instructions will be more efficiently carried out in an institution where trained nursing staff are in attendance. This is of particular relevance in an area such as this where they are admitted under our personal care. The burden is lessened by being shared. The elderly sick, however, often recover from the acute symptoms but with a reduced vigour and the question of their future is the social problem of our age.

Ratio of disease groups encountered

Knowing the number of patients that were involved with individual disease groups and the concern that these caused by consultation and visits for each, it is possible to produce a disease league table. Percentages are calculated according to the proportion of the total attention and the two decades are recorded separately to show any shift in priorities. Plus and minus is added to place in parenthesis any change.

The increases

Diseases of the respiratory system exceed all others and while the common cold continued to call for much attention, a marked reduction occurred from 1952 onwards when a charge was made for each prescription. This has masked the real increase which occurred among those involved with *influenzal cold* type of infection which was probably caused by a virus. *Tonsillitis* also showed a considerable increase. The increased need for attention for digestive system complaints was distorted since the

TABLE 4
THE LEAGUE TABLE OF DISEASES

Percentages first decade	*Disease group*	*Percentages second decade*
17·26	Respiratory +	*17·35*
11·80	Nervous system and special senses −	*10·85*
9·38	Skin and cellular tissue −	*8·88*
8·78	Digestive system +	*9·09*
8·54	Bones and organs of movement −	*7·09*
8·42	Accidents, poisoning and violence −	*7·68*
6·27	Mental, psychomatic and personality disorders +	*7·92*
5·19	Circulatory system +	*5·22*
5·19	Genitourinary +	*5·39*
3·83	Communicable diseases −	*3·27*
3·68	Inoculations and administration +	*6·37*
3·52	Senility and ill-defined conditions −	*2·79*
3·10	Allergic diseases +	*3·32*
2·63	Blood and blood forming organs −	*2·47*
1·37	Normal and abnormal deliveries −	*1·24*
0·81	Malignant and simple tumours +	*0·90*
0·15	Diseases of early infancy −	*0·07*

demand for some medicament for a simple dyspepsia was, like the common cold, much reduced when the prescription charge was imposed. This masked the distressing increase for treatment of *gastroenteritis*. The increase in *mental diseases* was not caused by an increase in *anxiety neurosis* and *psychotic* disease but was due to the almost insatiable demand for sleeping tablets which required much ingenuity and devious ways of persuasion to effect a reduction in the second five years of the second decade. *Diseases of the circulatory system* showed an increase in *myocardial ischaemia* and *infarctions* in both sexes and of *peripheral vascular diseases* among female patients. The *genitourinary diseases* involved a greater number suffering from *pyelonephritis*. This could have been influenced by a greater interest being taken in this disease and by better methods of diagnosis.

Inoculations comparatively showed the greatest increase and this is a manifestation of the increasingly important part the family doctor plays in preventive measures. The *allergic group of diseases* such as *urticaria* could have been caused by the increasing variety of foreign proteins injected into patients for their protection and the extensive use of antibiotics with which they were bombarded when a disposition was suffered. *Malignant diseases* show an increase probably because a greater number of patients were reaching the age when cancer is most frequently encountered. Fortunately for the patient, the position in the league table is low.

The decreases

Like some of the increases the figures for decreases are somewhat illusory and the *nervous system* and *special senses* exemplifies this since it includes certificates for eye examinations which were reduced from 985 in the first decade to 338 in the second. This could have been caused by the imposition of charges but a saturation of need may have played a part. Disease processes like *cerebrovascular incidents*; *acute otitis media*; *glaucoma* and the complaint of *vertigo* showed definite increases. The *skin and cellular tissues* showed a decrease in *septic conditions* due probably to better hygiene; more care being taken in factories by the treating of minor abrasions and more potent medicaments but the *dermatitis* and *eczemas* showed increases. This could be a further manifestation of allergic reactions to drugs and foreign proteins in both conditions, however the days off work and school were increased but days of invalidism were reduced.

Diseases of the bones and organs of movement ranked third highest as a cause of invalidism but this and days off work or school were much reduced in the second decade.

Better housing conditions and less exposure to inclement weather conditions may have been contributory causes as well as more rational treatment. *Accidents* of varying severity involved 1,965 males and 1,506 females. *Fractures* involving males were reduced from 158 in the first decade to 120 in the second. This with a reduction in *bruises* and *contusions* among males accounted for the small reduction in the total accidents since the female patients showed an increase in each variety.

The decrease in *communicable diseases* is due to a fall in the incidence of *tuberculosis*. The five principal infectious diseases—measles, mumps, whooping cough, chickenpox and rubella, involved 942 males and 845 female patients with one or more of these infections and the total increased from 849 in the first decade to 938 in the second. Fortunately, the virulence of these diseases was much less and the days of invalidism showed a reduction from 26,151 days to 10,361. This was the most notable achievement in the 20 years. The reduction in the need to diagnose *senescence* and *senility* indicates a retention of vigour to an older age since a greater proportion of patients reached 65 years in the second decade. *Blood and blood forming organs* was not a problem in this area with five males and 14 female patients showing a *hyperchromic anaemia* and the reduction was due to 392 female patients with the *hypochromic* variety in the first decade falling to 219 in the second. *Normal* and *abnormal* deliveries showed a reduction not because of a reduction in the number of births but may be that ' better nourishment produced better babies ' and mothers. *Diseases of early infancy* involved the problems of the rhesus factor abnormalities and advice about contraception may have aided this reduction.

Fry (1972) has suggested that it is possible for one doctor, in a suburban area, to give adequate and acceptable medical care to a population of 4,500. It would be inappropriate for me to dispute this contention but it is within the compass of my own experience to state that in a rural area with a widely scattered population and having the additional and welcome use of hospital beds this would be a formidable task physically, and mentally one that I would not care to undertake. The figures here show that the calls for service have been greater than his but my numbers at risk are a little more than half his total. An interesting feature is that despite much difference in location our disease group incidence parallels each other and they show similar changes in patterns as the years advanced.

This preliminary statement has been encouraged by the editorial *How many patients?* in *The Journal of the Royal College of General Practitioners* and is a synopsis of part of a more comprehensive review of *The Work of a Family Doctor* during the first 20 years of the National Health Service. This is undertaken with the aid of a grant from the Research and Intelligence Unit of the Scottish Home and Health Department.

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