Going to the doctor—attendances by members of 100 families in their first year in a new town

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SUMMARY. A study of 100 families' first year in a new town has shown that consulting rates are high, especially for psychiatric illness. Some reasons for this are discussed. If mobility has an effect on the health of individuals, with a consequent increase in the workload of general practitioners, then this must be taken into account in planning primary medical care services.

Introduction

The first year in a new town presents a series of difficulties to both patient and doctor alike. The desire to escape from the overheated society of sprawling cities and housing estates has led to the development of new towns. The mobility of society can lead to difficulties in continuing primary medical care, and knowledge of previous illness in individual patients and families is not always readily available. The needs of growing communities are beginning to be better understood, but new towns still only present a framework within which people must work out their own way of life.

Duncan (1969) has described the administration of the Health Services in Livingston New Town and Bain (1973) the functioning of the first health centre in the town. Gruer and Heasman (1970) have described the development of the computer-assisted medical record system used in Livingston. Basic registration data are maintained on a computer file and all general-practitioner/patient contacts were recorded between 1969 and 1972 and details of representing illness and treatments subsequently coded using the *International Classification of Diseases* (World Health Organisation, 1968) and the Department of Health and Social Security's drug index.

This study is concerned with patients registered with one of the doctors practising from Craigshill Health Centre. At the beginning of 1971 this practice had 1,334 patients and by December 1972 the list size was 1,629. The practice population was not static; between March and October 1971, 450 new patients registered with the practice.

It was decided to investigate more closely the health of families who registered for the first time and to find out the effects on people of moving to a new town as expressed in their contacts with a general practitioner.

Method

One hundred consecutive families who registered from March 1971 onwards were identified and formed the cohort to be investigated. For the purposes of this report a family was defined as " related persons living at the same address " (Backett *et al.*, 1953). Using this definition, the one hundred families yielded a total of 347 individuals. The first family registered on 1 March 1971, the hundredth on 8 September 1971.

Basic information on the families was available from the computer file and further information was obtained by one of us (D.J.G.B.). Details of previous medical history

and details of significant illness, previous operations, hospital admissions, illness requiring continual medical attention, and current drug therapy were recorded.

After this the patients' attendances at the health centre and home visits were recorded for a period of one year after the date of registration for each individual member of the cohort. Consultations made by the families during their first year in the town were noted by the organiser who checked the subsequent typed record and organised appropriate coding of diagnoses and treatments. During holidays, the practice secretaries noted episodes when colleagues in the health centre had treated patients.

The results of this study do not include attendances at antenatal clinics, developmental screening clinics, and child welfare clinics.

Results

Demographic characteristics

The age distribution of the members of the one hundred families studied is shown in table 1. There is a statistically significant difference in age between the cohort and the total practice population ($\chi^2=7{\cdot}99$, df=3, $p<{\cdot}05$) due to the excess presence of 16-30-year-olds in the 100 families' cohort. Despite this difference both the cohort and the practice are for the most part composed of young adults and children.

TABLE 1
AGE DISTRIBUTION OF THE 100 FAMILIES AND THE PRACTICE

	100 families		*Practice*	
Age group	*Number*	%	*Number*	%
Up to 15 years	137	(*39·5*)	668	(*41·5*)
16 to 30 years	123	(*35·4*)	465	(*28·9*)
31 to 60 years	82	(*23·6*)	444	(*27·6*)
Over 60 years	5	(*1·4*)	32	(*2·0*)
TOTAL	347		1,609	

Table 2 shows the composition of the families and it can be seen that nearly one third of the families comprise a married couple only, another one third are married couples with one or two children, while the remaining one third consist of married couples with several children or extended nuclear families containing grandparents, parents, and children.

TABLE 2
FAMILY COMPOSITION

Composition	*Number of families*
Married couple only	32
,, ,, +1 child	21
,, ,, +2 children	18
,, ,, +3 children	10
,, ,, +4 children	5
,, ,, +5 children	4
Other family groupings	10
TOTAL	100

The social class distribution of the 100 families does not differ significantly from that of the practice at large ($\chi^2=5{\cdot}71$, df=4, not significant). Table 3 shows that for both groups the class distribution has a relative lack of heads of families whose occupations would fall in class 1 and 2.

TABLE 3
SOCIAL CLASS DISTRIBUTION FOR 100 FAMILIES AND THE PRACTICE

	100 families		*Practice*	
Social class	*Number*	%	*Number*	%
1	9	(*2·6*)	83	(*5·2*)
2	35	(*10·1*)	169	(*10·5*)
3	152	(*43·8*)	705	(*43·8*)
4	62	(*17·9*)	285	(*17·7*)
5	89	(*25·6*)	367	(*22·8*)
	347		1,609	

Consultations

Table 4 shows that nearly half of the patients consulted within three months of registration and that one fifth did not consult at all during their first year in the town. These figures are true for both adults and children.

TABLE 4
TIME BETWEEN DATE OF REGISTRATION AND DATE OF FIRST CONSULTATION

Time	*Adults*		*Children*		*Adults + children*	
	Number	%	*Number*	%	*Number*	%
<1 month	46	*21·9*	29	*21·2*	75	*21·6*
1 month < 3 months	57	*24·1*	39	*28·5*	96	*27·7*
3 months < 6 months	34	*16·2*	26	*19·0*	60	*17·3*
6 months < 9 months	18	*8·6*	12	*8·8*	29	*8·4*
9 months <12 months	11	*5·2*	7	*5·1*	19	*5·5*
No consultations in first year	44	*21·0*	24	*17·5*	68	*19·6*
TOTAL	210		137		347	

The distributions of consultations by social class is shown in table 5.

TABLE 5
CONSULTATIONS BY SOCIAL CLASS

Social class	*Number of patients*	*Number of consultations*	*Consultations per patient per year*	
100 families	*100 families*	*100 families*	*100 families*	*Practice as a whole*
1 and 2	44	103	2·3	1·5
3	152	615	4·0	2·8
4	62	293	4·7	3·3
5	89	454	5·1	3·9
TOTAL	347	1,465	4·2	2·9

The variations in frequency of consultations are significantly different ($\chi^2=58·41$, df=3, $p< ·001$), social classes 4 and 5 having a notably higher consulting rate than classes 1, 2 and 3. All social class groups in the 100 families' cohort have a higher consultation rate than the comparable rates found for the practice as a whole.

Table 4 showed that 21 per cent of the adults in the cohort did not consult during the year. Those who did consult their general practitioner tended to do so with a limited range of presenting illness and the most common are listed in tables 6 and 7. Table 6 shows the most common illnesses presenting at first contact while table 7 shows the illnesses provoking the greatest number of consultations during the one year period of study.

TABLE 6
THE MOST COMMON PRESENTING ILLNESS IN ADULTS AT FIRST CONSULTATION

Disease or condition	*Number*	*% of those consulting*
Mental disorders	35	*21·1*
Disease of the respiratory system	23	*13·9*
Symptoms and ill-defined conditions	21	*12·7*
*Supplementary classification	26	*15·7*

*Used for conditions not in the *I.C.D.* (Mainly oral contraception).

TABLE 7
THE MOST COMMON CONSULTATIONS BY ADULTS

	100 families		*Practice*	
Disease or condition	*Number of consultations*	%	*Number of consultations*	%
Mental disorders	277	(*25·0*)	437	(*13·2*)
Disease of the respiratory system	181	(*16·3*)	497	(*15·0*)
Symptoms and ill-defined conditions	130	(*11·8*)	207	(*6·3*)
Other conditions	520	(*46·9*)	2165	(*65·5*)
Total consultations	1,108		3,306	

A comparison of tables 6 and 7 shows that the three *I.C.D.* categories which were most commonly used at *first* consultations were also the most common when all consultations during the period of study were considered. When the consultation figures for the 100 families' adults are compared with those for the practice (table 7) it can be seen that the former group have a greater number of consultations for " Mental disorders " and " Symptoms and ill-defined conditions ". This difference in consultation pattern is statistically significant (χ^2=228·84, df=3, $p < \cdot001$).

Of the children in the group, 17·5 per cent made no consultations; two thirds of those who did consult were assigned to one of the three conditions listed in table 8.

TABLE 8
THE MOST COMMON PRESENTING ILLNESSES IN CHILDREN AT FIRST CONSULTATION

Disease or condition	*Number*	*% of those consulting*
Disease of the respiratory system	43	*38·1*
Infective and parasitic disease	18	*15·9*
Symptoms and ill-defined conditions	15	*13·3*

As with adults, the conditions which were most common at first consultation were also the most common when all consultations were considered. Table 9 compares the consultation figures for the 100 families' children with those for practice children.

TABLE 9
THE MOST COMMON CONSULTATIONS BY CHILDREN

	100 families		*Practice*	
Disease or condition	*Number of consultations*	%	*Number of consultations*	%
Diseases of the respiratory system	142	(*39·8*)	553	(*35·9*)
Infective and parasitic disease	45	(*12·6*)	227	(*14·7*)
Symptoms and ill-defined conditions	33	(*9·2*)	89	(*5·8*)
Mental disorder	21	(*5·9*)	56	(*3·6*)
Other conditions	116	(*32·5*)	614	(*39·9*)
Total consultations	357		1,539	

Children from the 100 family group, like the adults, show a statistically significant difference in consultation pattern compared with practice children in general ($\chi^2=19·85$, df=4, $p<·001$). Once again the new patients have more consultations for " Symptoms *and ill-defined conditions*" and " Mental disorders," but the magnitude of these differences is less than for adults.

Home visits and treatment room attendance

In the 100 families' group there were 245 home visits during the year and the surgery consultation/home visit ratio was six to one, whereas the ratio of surgery consultations to home visits for the practice as a whole was eight to one. There were similar differences between social classes when patterns of home visits were studied, the home visit consultation rate for social classes 4 and 5 being twice that of social classes 1 and 2.

There was also a proportionally higher attendance rate at the treatment room in the health centre by patients in the 100 family group than by the practice population as a whole. The 100 families, representing 22 per cent of the practice population, had 272 treatment room attendances, which accounted for 25 per cent of the consultations at the treatment room. Social classes 4 and 5 were again noted to have higher attendance rates than other social classes at the treatment room.

Drug prescribing

A total of 993 items were prescribed for the 100 families during the year. These items averaged 0·68 items per consultation which is exactly the same as for the practice as a whole. Repeat prescriptions formed 14 per cent of the total and the majority of these (70 per cent) were for items prescribed by a former general practitioner.

Follow-up

During the two-year period from December 1972 to December 1974, 24 of the original 100 families have left the practice, and they accounted for 79 patients. A further 12 individual members of families have left giving a total of 91 (28 per cent) of the original 347 patients who were no longer registered at the end of 1974.

Study of the records of the remaining 256 patients has shown that in the case of adults the consultation rates for psychiatric illness, respiratory illness, and symptoms and ill-defined conditions have fallen to a level similar to the practice as a whole. The same result was found in the consultation rates for children with respiratory illness, infective illness, and symptoms and ill-defined conditions. There is no evidence to indicate that the patients who have left had a notably increased percentage of consultations during their first year in the town, compared with those who have remained.

Discussion

Nearly half of all the patients in the cohort consulted a doctor within three months of registration; for the same period at least one family member had consulted in 80 of the 100 families concerned. When the consulting pattern of the cohort is considered by social class it is seen that the patients from social classes 4 and 5 consult more frequently than those from social classes 1, 2, and 3. Similar findings have been reported by Kedward (1962) and by Rein (1969). While differing between each other all the social class groups in the 100 families cohort have higher consultation rates than those for the practice as a whole.

The overall excess in consultation rate is 45 per cent. If this is expressed in terms of numbers of patients then the 347 members of the cohort generate as many consultations as 503 established patients. In well established practices the extra consultations made by new patients may be noted and commented upon, but they do not have any great impact on the total workload. In the early years of a new town these extra consultations have considerable impact on the practitioner's workload and this factor should be taken into account when considering the number of practitioners required in a new town.

Psychiatric illness and respiratory disease are the most common reasons for consultation among adults; this holds for first consultations as well as for all consultations during the first year. The percentage of adults presenting with psychiatric illness in their first year in the town was 25 per cent which is nearly double the percentage consulting with psychiatric illness in the practice as a whole. In almost 13 per cent of first consultations adults presented with " ill-defined symptoms and signs " and the frequency of such presentations continued throughout the year. Since nervousness, debility, and depression are complaints subsumed under the " ill-defined symptoms " category it is clear that some of this group could well be considered in the psychiatric category as well.

The conspicuous psychiatric morbidity of this cohort is similar to that identified in other general practices (Goldberg and Blackwell, 1970; Hewetson *et al.*, 1963). The new town environment alone cannot account for all the psychiatric disorder extant in the cohort since four out of every ten patients who presented with psychiatric illness had a history of such an illness. Whether acquired by genetic means or by early social learning the behaviour by some of those with psychiatric disturbance was simply a continuation of a previous style of life.

Although the percentage of patients presenting with respiratory illness in the 100 family group was similar to that for the practice as a whole, the *consultation rate* was higher. This was particularly noticeable in children. Respiratory illness is well recognised as one of the most common complaints presented to doctors in general practice (Fry, 1966; Hodgkin, 1973), but the determinants of consulting behaviour in cases of minor respiratory complaints are largely unknown and in this study the frequent presentation of children may have been due to excessive parental uncertainty.

The results of this study suggest that where families have recently moved house and where there is a background of stress, there will be increased demand on doctors for commonly recognised conditions. The fact that newcomers to the practice had a much higher consultation rate did not appear to change the kind of treatment they received; using drug prescribing as an index of treatment the newcomers were given the same number of items per consultation as established patients.

Clearly the settling-in period is a time of great stress in a new community and since patients tend to look to their general practitioner for solutions to many of their day-to-day problems such times of stress will be reflected by high consultation rates.

Whitfield (1972) has claimed that because recently registered patients cause general

practitioners more work there should be a weighted capitation fee for these patients. We consider that more attempts should be made to provide adequate support services for general practitioners who have a high turn-over of " mobile patients," before compensating for increased workload by increasing payment to doctors.

Primary health care must provide for the patient's social and psychological needs as well as catering for physical aspects of life. A few exceptional individuals may possess therapeutic skills which can provide for all these needs, but others must rest content with a few skills only, integrating these with the skills of other professionals in some form of multidisciplinary team. The combined skills of a well-integrated team allow patients to be investigated and treated in depth at community level. The team approach is also one which helps solve the perennial problem of medical manpower, not by creating an inferior grade of medical practitioner, but by identifying those areas of primary care which are purely medical and those which fall within the ambit of nursing, psychology, or social work. The 100 families studied here have highlighted the fact that much of a general practitioner's time is spent dealing with problems of living rather than with ill-health as such. As our society becomes more mobile so problems of settling-in will present more often as problems of primary care. It is important that the general practitioner is provided with support services necessary to deal with these problems.

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