FIG 2—The probability of having at least one, two, etc, visits at different average visiting rates. (The smallest values are at the top.)[*]

can expect no new visits. Fig 2 shows why. The horizontal axis is the average daily visit rate. The vertical axis is the probability of the event occurring. The curved diagonal lines represent the probability of having at least one, two, three, or more visits. My own average visiting rate is 1·2 a day, and this is represented by the dotted vertical line. Going back to the practice with four new visits a day, assuming a very generous 30 minutes a visit, they have allocated themselves enough time for 10 a day. This is an event which is probably not going to occur as often as once in four years.

It used to be possible to rush through 15 or 20 patients, snatch a cup of coffee, and get out on the real business of the day doing visits. Years ago when I first went into practice I had to do 26 visits on the same day. I think it is a fear of being overwhelmed by this sort of demand that has made me so resistant to change. On the other hand, my time is expensive, and as it is paid for by the patients it should be available to them as and when they need it.

(national average 15%), it has to be said that communications are good and it is relatively easy to get to surgery. The rates would obviously be much higher in a rural area or with an elderly population. Note, incidentally, that for three days out of five I

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Practice Research

Mental illness in inner London

CONRAD M HARRIS

Abstract

From the perspective of general practice, hospital data indicating that the prevalence of mental illness is much higher in inner London than elsewhere in Britain may be misleading. A study in five inner London practices found morbidity patterns for mental disorder similar to those recorded in a national survey.

Introduction

Figures from sources outside general practice, such as hospital and other data quoted in *A Survey of Primary Care in London*,[1]

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indicate that the prevalence of mental illness is much greater in inner London than in other parts of the United Kingdom with, for example, high rates of suicide, addiction to narcotics, and admission to mental hospital. Is it safe to assume, therefore, that an inner London general practitioner's experience of looking after the mentally ill is very different from that of general practitioners elsewhere?

Methods and results

Five practices located in Kensington, Chelsea, and Westminster or in Camden and Islington collaborated with the department of general practice of St Mary's Hospital Medical School from 1979 to 1981 to collect data about all their patients and consultations. The data used here relate to 1980, and at the midpoint of the year the practices had 32 524 registered patients. As expected in this part of London, the proportion of young adults and the ratio of women to men were both very high; consultation rates and patients' consulting rates have therefore been directly standardised to the population of England and Wales for 1981 to facilitate comparisons with other sources of data, the calculations being based on five year age groups for men and women.

Up to two diagnoses could be recorded at each consultation; they were made without agreed criteria and coded according to the ninth

Data relating to mental disorders: five inner London practices (1980) compared with the second National Morbidity Study (1970-1) (NMS2)

	All mental disorders		Anxiety			Depression			Schizophrenia			Alcohol dependence and drug dependence			
	Study popula-tion	NMS 2	Study popula-tion	NMS 2		Study popula-tion	NMS 2		Study popula-tion	NMS 2		Study population		NMS 2	
												Alcohol	Drug		
Consultations/1000 patients	239*	298	63*	73		94*	105		15*	6·4		14*	5*	19*	2·6
No of consultations as % of total	10	10	2·7	2·5		4·0	3·5		0·66	0·21		0·54	0·21	0·75	0·07
No of individuals consulting/1000 patients	96*	110	41*	34		41*	36		5*	1·4		6*	2*	8*	0·8

* Standardised to population of England and Wales, 1981.

revision of the International Classification of Diseases (ICD).[2] There were 80 893 consultations, including 3874 with temporary residents; 101 277 diagnoses were recorded, and 20 818 individuals consulted at least once. Of the 7966 consultations for mental disorder, 448 were with temporary residents.

The table shows findings from the study population, together with statistics derived from the second National Morbidity Study, which provides the most readily comparable data.[3] The rates for the study population include temporary residents in the numerator but not in the denominator, a manipulation that is statistically awkward but which reflects realistically the work of the practices.

Discussion

There are inherent problems in comparing the two sets of data. Neither study laid down firm criteria for diagnosis, and diagnostic fashion may well have changed during a decade. Some combining of data has been required to equate the headings of the eighth revision of the International Classification of Diseases used for the national study with those of the ninth revision. The overall annual consultation rate of the London practices was only 2·5 per patient, even with temporary residents added to the numerator, whereas that of the national sample was 3·0. The London doctors could record two diagnoses for each patient, and did so in a quarter of their consultations, but the doctors of the earlier survey were allowed only one. Despite these problems, the similarity of the two sets of data for mental disorder as a whole suggests that comparisons may still be valid.

The most striking feature of the data is that anxiety and depression are found with roughly equal frequency in the two

surveys, but the figures for schizophrenia and for alcohol and drug dependence are very much higher in London. Though there is little doubt that the difference is a true one, these three conditions are not common enough to affect the overall pattern of morbidity greatly: anxiety and depression account for about two thirds of the mental illness in both samples.

Since the figures from the five practices are closely similar overall to those of the practices in the national study it seems fair to conclude that data which demonstrate a much greater psychiatric morbidity in London are misleading in the context of general practice.

The principals of the practices participating were: D Cohen; L Jacobs, A Evans, and P Willis; B Jarman, A Elder, and M Constantinidou; L Newman, A Antoniou, D Lister, L J Stringer, and I Osrin; and M Wilks and C Wigg. The work was part of a project funded mainly by the Department of Health and Social Security, and I am grateful to B Jarman and P White for help in creating the recording system and method of standardisation.

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(*Accepted 14 February 1984*)

Child consultation patterns in general practice comparing "high" and "low" consulting families

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Abstract

All children's consultations with their general practitioner over a 12 month period in a small urban practice were analysed. Overall consultation rates ranged from 2·2 per child a year for 8 to 11 year olds, to 6·8 for those under 2. Families were grouped according to their average rate

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of new consultations for children, standardised for age. Families with higher consulting rates scored higher on an index of economic disadvantage, with mothers who scored higher on a test of "tendency to consult" and who were less educated than those in lower consulting families. The presence of any doctor-defined "significant disease" in any child was highly correlated with the family's consultation rate.

Introduction

"Illness behaviour," the processes by which symptoms are differentially perceived, evaluated, and acted on, is the normal antecedent to the act of consulting a doctor, particularly the general practitioner. Thus it has been shown that parents of

children who show any signs of illness go through a complex process of decision making, which includes reference to past experience, the advice of others, and the estimation of risk, cost, and likely benefits.[1] [2]

Blaxter and Paterson, in a detailed study of families in social classes IV and V in Aberdeen, showed that families who were more disadvantaged (in social and economic terms) were more likely to consult less than other families, and they suggested that the mothers might both perceive illness in their children less readily and also consult less readily.[3] Collins and Klein reanalysed data in the General Household Survey and concluded that there was no evidence for "over usage" of general practice by people in poorer socioeconomic groups, and that the reverse might be true.[4]

The consultation patterns of children differ from adults in apparent social gradients, and other evidence suggests that the "rules" applied to the decision to consult are different for adults and children,[5] so we decided to study the consultation patterns of children in a small urban general practice to identify socioeconomic factors that might be associated. The aim of the study was to relate children's consultation patterns to social factors and to attitudes expressed by mothers about their children's health.

Method

A long established single handed Dundee practice, based in the doctor's house, was taken over by the university department of general practice in 1977 and after two years in separate premises it moved to a new health centre with two larger practices. During the study period (1982-3) three established practitioners (members of the department) and a trainee worked in the practice, which had a list size of just under 2000 patients. Our hours calls were covered by a rota with the other six doctors in the health centre. One casualty department serves the whole of the city and sends carbon copies of all attendance records to the patient's general practitioner.

All families with children under 12 years were invited by letter to be included in the study. Of 120 families, only one refused to take part. Three were excluded because the mother was not registered with the practice, and three moved away during the study.

CONTACT RECORDING

All face to face contacts with doctors were recorded on contact sheets, noting the type of contact (doctor or patient initiated, and at home, in surgery, or in a baby clinic), and up to three problem statements. Doctors were asked to record only sufficient details appropriate to the circumstances, such as symptom, syndrome, or cause of disorder or disease, if known. Casualty attendances were recorded from the duplicate hospital notes, routinely sent after each attendance. The problem statements were coded according to the International Classification of Health Problems in Primary Care.[6]

The children were allotted to four age groups, based on their age at the midpoint of the study (under 2 years, 2 to 4, 5 to 7, 8 to 11). All contact data were entered on to computer file for analysis using SPSS (statistical package for the social sciences) on the Dundee University DEC-10 computer.

Each mother was interviewed in her home during the study by JG, using a semistructured format, to obtain basic sociodemographic data and also her answers to a test of knowledge of children's illness and to a scenario instrument to assess her intentions in hypothetical illnesses.[7] From the contact data the number of patient initiated contacts for each child was calculated. There was a clear age gradient with decreasing contacts with age (table I) so a standardised index was devised to control for age of child and number of children in the family: Age standardised consultation index=(Sum of observed contacts ÷ 100)/Sum of expected contacts, where expected contacts were the average for each age group.

Results

The problems that had been recorded on contact sheets were classified into the main ICD (International Classification of Diseases)

groups and further amalgamated when numbers were small. Table I relates to contacts initiated by the family, usually the mother, and table II to contacts initiated by the doctor or health authority (in the case of immunisation and screening). All such preventive work was done by the practice for all families on the list. There is a clear age gradient in overall contact rates, most contacts initiated by patients showing the same trend, but only prevention in the doctor initiated contacts.

Because the same coding was used these rates are directly comparable with published results from the second national morbidity survey (1970-1).[3] Table III gives the rates for all conditions, for three groups of conditions, and for one specific diagnosis. There is a

TABLE I—*Distribution by age and problem category of 502 contacts initiated by patients during the study year (rates per child in parentheses)*

ICD group	Age group (years)			
	Under 2 (n = 39)	2-4 (n = 42)	5-7 (n = 42)	8-11 (n = 54)
I Infections	28 (0·7)	17 (0·4)	13 (0·3)	16 (0·3)
V and VI Mental and sense organs	34 (0·9)	35 (0·7)	16 (0·4)	9 (0·2)
VIII Respiratory	62 (1·1)	51 (1·1)	45 (1·1)	24 (0·4)
XII Skin	15 (0·4)	12 (0·3)	7 (0·2)	4 (0·1)
XVI Symptoms, signs, and ill defined conditions	15 (0·4)	11 (0·2)	11 (0·3)	16 (0·3)
XVII Trauma	15 (0·4)	10 (0·2)	6 (0·1)	12 (0·2)
All others	10 (0·3)	6 (0·1)	9 (0·2)	6 (0·1)
All conditions	159	142	108	93
Overall rate per child per year	4·1	3·0	2·6	1·7

ICD = International Classification of Diseases.

TABLE II—*Distribution by age and problem category of 273 contacts initiated by doctor during study year (rates per child in parentheses)*

ICD group	Age group (years)			
	Under 2 (n = 39)	2-4 (n = 42)	5-7 (n = 42)	8-11 (n = 54)
I Infections	2 (—)	2 (—)	6 (0·1)	5 (0·1)
V and VI Mental, nervous system and sense organs	10 (0·3)	21 (0·4)	24 (0·6)	2 (—)
VIII Respiratory	9 (0·2)	13 (0·3)	21 (0·5)	6 (0·1)
XVIII Preventive	75 (1·9)	31 (0·6)	9 (0·2)	2 (—)
All others	9 (0·2)	4 (0·1)	2 (—)	9 (0·2)
All conditions	106	74	65	28
Overall rates	2·7	1·5	1·5	0·5

TABLE III—*Comparison between study data and Second National Morbidity Survey (1970-1)*

Source: Age group:	NMS (0-4)	Dundee (0-4)	Ratio	NMS (5-14)	Dundee (5-11)	Ratio
All conditions	3·63	5·53	1·5	1·93	3·06	1·9
Infections	0·26	0·96	2·2	0·22	0·42	1·9
Respiratory	1·26	1·31	1·0	0·66	1·00	1·5
Prevention	0·60	1·22	2·0	—	—	—
Acute otitis media	0·29	0·90	3·1	0·13	0·25	1·9

noticeable discrepancy that requires explanation. Consultation rates north of the border are generally reported to be higher than in England.[8] The difference in age grouping for the older age group might have a small effect on those figures, but the lower age groups are exactly comparable. The twofold increase in preventive contacts could represent a real change in practice over the 12 years between the studies. Otherwise, the difference probably represents a difference in illness behaviour of this small group of mothers compared with a very large sample of the general population.

We wished to identify those families in which one or more children had had "serious" or at least "significant" disease, by medical criteria, to see how this influenced the overall consultation rate for the family. A list of such disorders was drawn up (table IV) from the list of all problems encountered, representing the most serious or important medical problems. Just over half the families had had at least one such problem in the study year, and these problems accounted for nearly one third of all contacts. The relation between this variable and the consultation index is shown in table V. As might be expected, there is a positive correlation between the two, and indeed this

TABLE IV—*Diagnoses used to classify families as "significant disease present"*

Problem	No of families with any episodes	Total No of contacts	Per cent of all contacts
Acute otitis media	37	91	12·4
Bronchitis	24	45	6·1
Asthma	5	18	2·4
Pneumonia	2	3	0·4
Allergic rhinitis	7	17	2·3
Eczema	11	12	1·6
Urinary tract infection	4	7	0·9
Delay in development	2	5	0·7
Behaviour disorders	2	21	2·9
Non-suppurative otitis media	2	3	0·3
Anaemia	1	3	0·4
All	61*	224	30·5

*61 families had one or more of these problems.

TABLE V—*Cross tabulation of family consultation index (quartiles) with presence or absence of significant disease in any child*

	Consultation index				
	Low	Medium low	Medium high	High	Total
Any significant disease present at least once	7	11	20	23	61
No significant disease present	21	16	10	5	52

$\chi^2 = 22.26$; 3 df, $p = 0.0001$.

TABLE VI—*Differences in sociodemographic variables between highest and lowest consulting families (high and low quartiles)*

Variable	Mean (low consulting families)	Mean (high consulting families)	t	p
Age of youngest child	4·3	4·1	-0·07	NS
Age of mother	31·6	28·5	1·84	NS
No of children	2·0	1·5	NS	NS
Mothers' educational level (scale of 1 to 4)	2·64	1·62	3·75	0·001
Fathers' educational level (scale of 1 to 4)	2·62	2·10	1·61	NS
Economic factor*	-0·25	0·54	-3·18	0·002
Scenario action score*	13·4	16·5	-2·42	0·02

*See text.
NS = Not significant.

Discussion

Consultation rates for children in general practice are higher than for other age groups (apart from very old people). A small part of the excess is due to the substantial amount of routine preventive child care now carried out by some general practitioners[1]; in our study this accounted for 28% of all contacts in children under 2 and much less for older children. Either younger children are perceived to suffer more illness than older children and adults or they are taken to the doctor more readily, or both. Evidence for the first of these was obtained from health diaries kept by mothers during this study, in which important age related trends in symptom perception and frequency of episodes were found corresponding to the trends in consulting rates. Evidence for the second hypothesis is provided by Locker[1] and by Robinson[1] in their in depth studies of how families deal with symptoms.

Our results also show an appreciably higher use with lower socioeconomic status. This seems to conflict with Blaxter's results, which showed less use by poorer families.[3] The difference may be explained by the sampling methods used. Whereas our study population was biased slightly towards the upper social classes, compared with the general population, Blaxter's study was based only on "working class" families, within which there was a greater degree of deprivation than in our group. Her detailed study of this deprived group undoubtedly shows a lack of recognition of children's illnesses, and a reluctance to consult doctors among the "most deprived" families, a distinction that our study was too broad to identify.

Our finding that a "doctor defined" significant diagnosis is more highly associated with consulting rates than any social or economic measure is important, if only to set in context the reported associations between such measures and use. Though it may be obvious that children with "significant diagnoses" will have seen their doctor, we have shown that these children and their siblings attend more often with other, less important, complaints. The perceived threat of any symptom is heightened by the previous experience of a significant disease.

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(*Accepted 8 February 1984*)