Medical morbidity of the homeless

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SUMMARY A prospective study was carried out over a three year period to assess the morbidity pattern of the homeless in Manchester. A principal diagnosis was recorded for each patient consultation during the delivery of primary health care to this population. The diagnoses were grouped and analysed in comparison with expected levels in the general population, both with and without adjustment for social class. Although the total numbers of annual consultations were similar to those expected, the morbidity pattern was very different. High consultation rates in some groups (psychiatric and dermatological conditions) were balanced by low consultation rates in other groups (cardiovascular and musculoskeletal conditions). Thus the provision of primary health care to the homeless is shown to be no greater than to the general population, after adjustment for social class.

The homeless form a subgroup which, when allied to their adverse social circumstances, suggests that they would require more than the average amount of medical care.¹⁻⁴ For example, Scott *et al*¹ revealed that more than half suffered from chronic disease. Furthermore, they are subject to a significant excess mortality.^{5,6} Despite this, even today, large numbers of homeless people experience difficulty in obtaining medical care.⁷ With no fixed address, they are often not registered with a general practitioner.⁸ A survey in Edinburgh⁹ revealed that a mere 32% of hostel residents were registered with a general practitioner whereas the figure for registration for Scotland as a whole was 106%.¹⁰ The various aims of the National Health Service are not geared to meet the needs of this population, and inefficiency and expense ensue when contact is achieved.¹¹

A study of this group is notoriously fraught with difficulty. Obtaining reliable information is itself a major obstacle in carrying out meaningful research.¹² With the well known pitfalls of retrospective studies this research was conducted on a prospective basis.

There has been a general reluctance among the medical profession to become involved with the homeless. This has resulted in a poverty of information and an absence of detailed research. However, research in this context has recently been revived by renewed interest in the allied fields of the relation between chronic ill health and unemployment,¹³ the detrimental impact on society of increased alcoholism,¹⁴ and, most important, the health of the inner cities population.^{15,16}

Before health care planning for the homeless can be meaningfully directed an exact identification of their

current needs must be made: this was the principal task of the present survey. The implication of the disease patterns among the vagrant population clearly extends beyond the vagrants themselves and impinges on the health of the whole society. There is thus a pressing need for research both from the immediate needs of the individual and in the wider epidemiological context. The recent renewed interest in homelessness has prompted me to further examine data collected, which may be of value to those who continue to work in this field.

Method

For this prospective study, primary medical care was provided to six hostels and two day centres situated in the city of Manchester. Surgeries were held twice weekly in the two largest hostels and weekly in the other hostels and day care centres. Although the service was intended primarily for the residents of the individual hostels, occupants of any hostel or those 'sleeping rough' could attend any surgery session. For each patient consultation, the age, sex, and principal diagnosis were ascertained, recorded, and collated. The patients' social class was determined according to their past occupation. The total attendances in each disease group were aggregated over a 30 month period (July 1979 to December 1982). The expected numbers of consultations were evaluated using the Royal College of General Practitioners age/sex specific consultation rates of the UK.¹⁷

A comparison of the observed number of consultations with the expected number was made using the chi-squared test for each disease group.

Results

The number of residents, by age and sex, of the six hostels and two day centres is shown in table 1. Their social class distribution is shown in table 2. The comparison of the observed number of consultations with those expected for each disease group is shown in table 3. This shows the comparison using morbidity rates of both the overall population of England and Wales and after adjustment for differing morbidity rates in different social classes.

Table 1 Age/sex distribution of the catchment population

Age (yr)	Total	Men	Women
15	—	—	—
15–24	50	50	—
25–44	1050	1000	50
45–64	1100	1050	50
65+	300	300	—
Total	2500	2400	100

Table 2 Social class distribution of the catchment population

Social class	Number	%
1	3	0.1
2	5	0.2
3	62	2.5
4	290	11.5
5	2140	85.7
	2500	100.0

Each disease group's observed frequency was tested against the expected frequency, and the resultant level of significance is shown in the columns adjacent to the expected frequencies.

Six of the disease groups had significantly higher than expected numbers of consultations, seven were significantly lower, and only two were non-significant (see table 3). After adjustment for social class the two non-significant groups (gastrointestinal and social) became significantly lower than expected. The average annual consultation rate was calculated by dividing the total number of consultations by the total number of homeless patients seen over one year. This annual consultation rate was 3.4. This was significantly higher than that of 3.1 expected for the general population,¹⁷ but significantly lower than the social class adjusted expected rate of 3.5.

Discussion

An attempt is made in this paper to determine prospectively the morbidity of the homeless as revealed in the records kept during the delivery of primary care, as previously reported.¹⁸ The collection of reliable data about the patients and their illnesses in such a primary care context is difficult. The principal purpose of this study was to gather information over a considerable period of time in order to establish the endemic levels of disease presentation among the inhabitants of common lodging houses. Thus only a segment of the 'homeless' have been sampled. The families living in, for example, bed and breakfast

Table 3 Comparison of observed and expected numbers of consultations for each disease group

Disease group	2½ years 1979–81 observed	All social classes		Social class adjusted	
		Expected	χ ²	Expected	χ ²
Communicable	980	445	643* +	627	199* +
Neoplastic	170	483	203* –	355	96* –
Metabolic	340	428	18* –	467	35* –
Haematological	281	148	120* +	112	255* +
Psychiatric	4301	1700	3980* +	2307	1723* +
Alcoholism	2209	—	—	—	—
Cardiovascular	608	2810	1726* –	2615	1540* –
Respiratory	2828	3667	192* –	4810	817* –
Gastrointestinal	1392	1365	0.5ns	1945	157* –
Genitourinary	1085	473	792* +	598	397* +
Dermatological	2454	1145	1496* +	1260	1131* +
Musculoskeletal	918	2020	601* –	2562	1054* –
Trauma	1681	1280	126* +	1957	39* –
Social and others	1283	1302	0.2ns	1522	37* –
Prophylactic	—	653	653* –	550	550* –
Nervous system	926	1267	91.8* –	1365	141* –
Total	21 456	19 192	267* +	22 065	17* –

*+ Significant at 0.1% level with Observed > Expected *– Significant at 0.1% level with Observed < Expected ns not significant

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accommodation, paid for by the local authorities, have not been included, although they must be considered as homeless. The denominated population is ever changing, and this catchment population may have altered over the two and a half years during which the information was gathered. The results were compared with the National Morbidity Survey, which may be faulted in that it is a relatively small and a particularly biased survey of general practitioner activity. This survey thus included all patients seen over a two and a half year period. Other researchers concerned with the morbidity of the homeless have only conducted their work over a considerably shorter period of time. However, as shown in the results of this paper, information gained from short term studies overstate the true morbidity of the homeless population. Short term studies will merge current disease patterns with a backlog of previously untreated chronic disorders. Because of the difficulty of the homeless in obtaining medical care, their diseases will often have reached an uncommonly severe level and have a dramatic impact on the practitioner. Such imagery has prompted the reporting in the medical press of the plight of the homeless. However, this paper attempts to display a more realistic appraisal of their state of health.

Consultation rates are unsatisfactory measures of morbidity in general practice because of the different practice circumstances and organisation.¹⁹ For example, a doctor in an area of relatively low morbidity who sees his patient frequently would give as many consultations as a doctor in an area of high morbidity. Patient consulting rates provide a better guide to morbidity in a given area as they are affected by practice circumstances to a smaller extent. The day to day running of the practice was constant and there were no changes in policies such as appointment systems, which are known to alter consulting rates and bias certain disease groups.²⁰ In this study, the author recorded one principal diagnosis at each consultation, even though patients often presented with more than one symptom, and these had to be weighed in order of importance. This method of establishing morbidity in a given population is well established.²¹ Basic diagnostic criteria differ from doctor to doctor. They might give the same set of symptoms different names but provide essentially the same treatment. Strictly accurate diagnosis is not necessary for many conditions seen by the general practitioner, provided the treatment and follow-up are appropriate. However, in this survey all consultations were carried out by the author and so diagnoses were not subject to intra-observer variation.

The structure of the catchment population of a practice will have an effect on the numbers who attend. Clearly there is a preponderance of middle aged men in

the homeless population and 86% are currently of social class 5. The frequency of consultation for each disease group was compared with that expected for all social classes and after social class adjustment. In this study a comparison of the total attendances with those expected showed a significantly larger number of consultations in the homeless when compared with the general population. However, after adjustment for social class, the total number of consultations was slightly smaller than expected. This is of little relevance in practical terms, as it constitutes a difference of only 240 consultations a year (ie, less than 0.1 consultation per person per year). It may also be attributable to changes in patients between the period of the most recent RCGP study¹⁷ and this study some ten years later. These findings suggest that the provision of health care for the homeless population is similar to the workload of other general practices. However, the time taken for consultations was found to be longer than the author's experience in an ordinary general practice. This was often due to lack of communication, bizarre behaviour, and drunkenness among this group, coupled with the need for detailed explanations and personal counselling. Communicable, haematological, psychiatric, genitourinary, and dermatological diseases were all markedly increased among the homeless, even after adjustment for social class. It is to be expected that communicable diseases are more prevalent among this group because of severe overcrowding, poor nutrition, and other socioeconomic factors.

In this study the author undertook all consultations so there was no inter-observer variation. Although consultation rates may be influenced by a knowledge of the service provided, the more publicity, the greater the consultation rate. The medical care was provided directly to the homeless either at their place of residence or at a day centre which they frequented during the day, as they had compulsorily to leave their sleeping place during the day. There was no compulsion to see the doctor and there was no publicity or advertising to attract clients. However, by word of mouth and deed this provision became well known and accepted—largely due to its taking place within their easy access within their own domain. The homeless man or woman lives without the privacy, possessions or personal contacts which are to the majority in society the basic requirements of a home. It is probable that this is often one of the outcomes of personality defects which determine the incapacity to develop close personal relationships, a stable marriage, and a consistent role in society. A hostel dweller tends to be an individual who is in some way handicapped from living in the community.

Many of the mentally ill represent failure of community care. One of the reasons often given for

this failure to provide resources is that the population is a shifting one with a high degree of geographical mobility. However, this has been shown not to be true.¹⁸ Many of the homeless are geographically stable, suggesting that many could be accessible to provision to ameliorate their suffering on a long term basis.

Health care for the homeless is one of the fundamental issues of the provision of medical care to the inner cities. Despite the increasing awareness of the complexity of inner city problems, the needs of the homeless—the ultimate product of social rejection and destitution—have been neglected, although there have been a number of attempts to provide medical care to the homeless including: salaried practitioners in London²² and Liverpool; 'nurse practitioners' as suggested in the Cumberlege report,²³ and the 'house doctor' scheme in Edinburgh.⁴

Even specific studies purporting to investigate the health care problem of inner cities^{15 16} have ignored the subject of homelessness. The homeless are now thought to number in excess of 100 000. This study shows that the long term overall workload is similar to, but the patterns of disease are different from, those of the rest of society. The total demand of the homeless on the primary health care service is similar to that of the general population in terms of size, but different in terms of disease patterns. Though several common trends run through the pattern of problems in different cities, each needs to be considered on its own merits and with regard to local resources. The problem of provision of care is not one of great demands, but that of providing a consistent service readily accessible and acceptable to this under-privileged section of society. Consideration should be given to the creation of rotating posts in, for example, vocational training schemes in answer to this recalcitrant problem.

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