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The Camden Schizophrenia Surveys
II. High Prevalence of Schizophrenia in an Inner London Borough and its Relationship to Socio-Demographic Factors

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Background. Investigation of the geographical distribution of schizophrenia and its relationship to socio-demographic factors is useful for planning services.
Method. Individuals with schizophrenia (n=980) were identified by key informants within an inner London borough and point prevalence calculated for broad, Feighner and DSM–III–R schizophrenia. The distribution of cases was tested for significant variation using the Poisson process model. Regression models using the Jarman-8 score and its component variables were tested for their ability to predict the prevalence of schizophrenia.
Results. A high point prevalence of schizophrenia (5.3 per 1000 resident population) was demonstrated. Case distribution showed a marked and significant variation associated with socio-demographic factors. The prediction of prevalence was more accurate for broad than for narrower definitions of schizophrenia; unemployment rate performed best.
Conclusions. Unemployment rates and Jarman-8 scores may provide crude estimates for resource allocation in planning mental health services, highlighting the need for additional services in deprived inner city areas.

Recent studies have suggested a 10-fold variation in prevalence of schizophrenia (Torrey, 1987). An increased prevalence of schizophrenia in central areas of low social status within modern industrialised cities has been consistently reported (Faris & Dunham, 1939; Freeman & Alpert, 1986*b*; Giggs & Cooper, 1987). However, few studies have examined whether the geographical variation of schizophrenia is more than a chance finding (Hare, 1956; Giggs, 1983; Youssef *et al*, 1991). There is accumulating evidence of a relationship between psychiatric morbidity and socio-demographic factors (Royal College of Psychiatrists, 1988; Thornicroft, 1991; Thornicroft *et al*, 1992; Huxley & Kerfoot, 1993). All of these studies have used proxies for true prevalence (e.g. admission rates) and related these to the Jarman index (Jarman, 1983, 1984) as a measure of underprivilege in a defined geographical area. Although the index has been criticised (Campbell *et al*, 1992), Jarman *et al* (1992) have shown that the number of psychiatric admissions for a district can be predicted almost as well by Jarman scores as by the best available model derived from regression analyses. Few studies to date have examined morbidity data specific to schizophrenia (Lomas *et al*, 1973; Thornicroft *et al*, 1993). Surprisingly, Thornicroft *et al* (1993) found no associations between census variables and either the incidence or prevalence of schizophrenia.

In the Camden Schizophrenia Surveys, conducted separately in two halves of an inner London borough, the prevalence of schizophrenia was estimated using a key informant methodology and recognised diagnostic criteria were applied. These morbidity data were used to examine the geographical distribution of schizophrenia. Also, the relationship between schizophrenia prevalence and those socio-demographic factors available at the electoral ward level, previously reported to be associated with psychiatric morbidity, was investigated.

Method

The Camden Schizophrenia Surveys took place in two former health districts, described elsewhere (Harvey, accompanying paper; Campbell *et al*, 1990). The census date for the point prevalence survey in South Camden was 1 October 1985 and in North Camden was 28 July 1986. At the time of the surveys, North Camden (Hampstead Health

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District) had a population of 98 517, while South Camden (within Bloomsbury Health District) had a population of 62 583 (Office of Population Censuses and Surveys (OPCS), 1981).

In common with other metropolitan areas there was a high turnover of the population: 17% of North Camden and 18% of South Camden residents had a different address one year previous to Census night (OPCS, 1981). Regional (9%) and national (4%) comparators highlighted the high mobility in this area. South Camden services managed a higher proportion of transient patients, in part due to the location of the majority of the homeless person hostels providing refuge for over 750 people in this area.

Jarman scores range from −32.79 to 54.89 for the English Health Districts (Jarman, 1983, 1984). The average national deprivation score on this scale is zero, so negative figures indicate less deprivation and positive figures more deprivation. Bloomsbury (including South Camden) ranked 9th (Jarman score = 35.79) with a higher level of social deprivation than Hampstead (North Camden) which ranked 18th (Jarman score = 24.68) among all English Health Districts.

Patient identification and assessment

This is described in detail in the previous paper (Harvey, this issue) and was identical in both surveys. This included the application of DSM–III–R diagnostic criteria for schizophrenia (American Psychiatric Association, 1987) and Feighner criteria for definite or probable cases of schizophrenia (Feighner *et al*, 1972).

Calculation of point prevalence

The point prevalence of schizophrenia was calculated for the borough of Camden and for both halves of the borough using the total populations identified by the key informant methodology, as described below.

For the purposes of mapping, the schizophrenia point prevalence for each of the 26 Camden wards (mean ward population 7160; range 4008 to 11 497) was calculated for the patients resident in a Camden address. Patients who were of 'no fixed abode' and those who were resident outside the borough together with old long-stay in-patients with admissions greater than 5 years and new long-stay in-patients with admissions between 1 and 5 years (except those with a viable address) were excluded from this mapping analysis. Six patients who had moved between the two halves of the borough between the two census dates were identified. For the purposes of this analysis these six individuals were included in the estimates of the prevalence of schizophrenia for both North and South Camden residents, on the assumption that the movement of patients in either direction was balanced between the dates of the two surveys. Patients resident in the south of the borough and identified solely in the North Camden survey and patients resident in the north of the borough and identified solely in the South Camden survey were excluded from the mapping. This was because there was a possibility of introducing a bias towards higher prevalence in wards adjacent to the boundary between North and South Camden because we could not identify patients resident in Camden yet using services in neighbouring boroughs. Previous studies have used a number of methods to estimate point prevalence including correction and standardisation for age (Torrey, 1987), which attempt to take account of different population age structures (e.g. large numbers of children will lower the prevalence). These figures have been calculated for our data. Age standardisation made little difference to the prevalence of schizophrenia, demonstrating that the population age structure of Camden was close to that of Great Britain. Comparable prevalence studies in the United Kingdom have published figures uncorrected for age, making presentation of such corrections of our data unnecessary for comparison; age correction also made little difference to the results of the mapping analysis (results available from the authors on request).

The base population figures were derived from two sources: (i) 1981 Census Small Area Statistics (OPCS, 1981) providing the most accurate estimates of the base population in Camden; (ii) population figures from the London Research Centre for 1985 for South Camden and 1986 for North Camden (London Research Centre, 1991). These were borough and ward projections from the 1981 Census, adjusted for births and deaths since the Census and using changes in the electorate as a proxy for total population changes. These were used because the census dates for the surveys were four and five years post National Census and if changes in the base populations were marked this would significantly alter the prevalence of schizophrenia.

Mapping analysis

Two distinct questions were considered with regard to the geographical distribution of schizophrenia. First, the ward point prevalence figures for Camden residents were examined for conformity to a Poisson process model for random occurrences in

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space (Norcliffe, 1977). Second, the predictive abilities of regression models using the Jarman-8 score and its individual component variables from the 1981 National Census (elderly people living alone, children aged under 5 years, single parent households, unskilled workers, unemployed, overcrowded households (persons/room), moved house recently, people born in the 'New Commonwealth' or Pakistan) were compared. Models with both Normal and Binomial error structures were employed. The Binomial (Logistic Regression) model was more appropriate since the more usually applied Normal model can give predicted proportions outside of the 0 to 1 range. There proved to be little difference in the predictive capabilities of the two methods, and the results of both are presented.

Results

A total of 980 individuals fulfilling the broad diagnostic inclusion criteria were identified in both North and South Camden, 76 of whom were identified by both surveys. Of this total, 107 (11%) were new or old long-stay patients (resident in hospital for more than one year), 79 (8%) were acute in-patients and a further 794 (81%) were resident in the community at the time of the census. Of these latter 794 community patients, 193 (24%) were managed only by a GP.

Seventy-two of the 980 survey patients (7%) had never experienced admission; 137 patients (14%) lived outside Camden yet used services in the area. A detailed description of the total North Camden (Hampstead) survey population is presented in the accompanying paper.

Table 1 describes the allocation of Feighner and DSM–III–R diagnostic criteria for schizophrenia within this broad group of 980 survey patients using all information. Six hundred and forty-five individuals (66%) fulfilled at least one of the two narrower diagnostic criteria. Of the remaining 335 fulfilling neither sets of criteria, 88 (9%) had a current case-note diagnosis of schizophrenia and 216 (22%) had a current diagnosis consistent with 'spectrum conditions' (schizophreniform psychosis, schizoaffective psychosis, paranoid psychosis or query schizophrenia). Thirty-one individuals (3%) were retained in the survey having met the broad diagnostic inclusion criteria according to the key informants, although there was insufficient case-note data and interview data (missing in 87%) for the diagnostic criteria to be applied.

Four hundred and twenty-nine individuals (44%) met the criteria for Feighner positive schizophrenia and a further 143 (15%) met those for probable schizophrenia; 538 (55%) fulfilled the criteria for DSM–III–R schizophrenia. It was not possible to allocate a Feighner and DSM–III–R status in 135 (14%) and 182 (19%) of the 980 patients, respectively. Taking these missing observations into account gave a rate of 51% Feighner positive and 17% Feighner probable schizophrenia, and a rate of 67% DSM–III–R positive schizophrenia. The concordance between DSM–III–R and Feighner definitions was good ($\kappa = 0.72$), which is in keeping with the findings of Helzer *et al* (1981).

Table 1
Feighner and DSM–III–R diagnoses for the total survey population of 980 individuals with 'broad' schizophrenia

	DSM–III–R positive	DSM–III–R negative	DSM–III–R not known	Total
Feighner definite	360	23	46	429
Feighner probable	105	18	20	143
Feighner negative	46	188	39	273
Feighner not known	27	31	77	135
Total	538	260	182	980

Patients resident in Camden only

There were 698 patients with broadly defined schizophrenia who were resident in a Camden address. The mean age of these patients was 47 years (median 44; range 18 to 91 years); 381 (55%) were female and 392 (60%) were single. The country of birth and upbringing was the UK in 415 individuals (64%) and Eire in 66 individuals (10%), while 26 (4%) were born in the West Indies and 18 (3%) in Africa. The majority of patients were living in independent accommodation (467; 72%) with 80 (13%) living in group accommodation (39 in hostels or group homes, 19 in supervised flats, bedsits or 'foster care schemes', and 22 in local authority (Part III) homes for the elderly) and a further 87 (13%) living in temporary accommodation (mostly hotels or hostels). Fourteen per cent (82 of 576 for whom data were available) had a different address one year previously. The mean duration of illness was 15.9 years (median 14.0; maximum 55 years) with an average of 4.8 in-patient admissions (median 3.0; maximum 60).

Prevalence of schizophrenia

The point prevalence of broadly defined schizophrenia in Camden based on the total survey population and the 1981 Census was 6.1 per 1000 resident population (3.6 per 1000 population for patients fulfilling Feighner diagnostic criteria and 3.3 per 1000 population for patients fulfilling

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DSM–III–R criteria). Corresponding figures for the total Camden survey population based on population estimates for 1985/1986 for 'broad', 'Feighner positive' and 'DSM–III–R positive' schizophrenia were 5.3 per 1000, 3.1 per 1000 and 2.9 per 1000 resident population, respectively. All other figures were based on population estimates for 1985/1986. Separate prevalence figures for the two halves of the borough for 'broad', 'Feighner positive' and 'DSM–III–R positive' schizophrenia were: in North Camden 4.7 per 1000, 2.6 per 1000 and 2.2 per 1000 and in South Camden 7.3 per 1000, 4.7 per 1000 and 4.9 per 1000 resident population, respectively. Finally, the prevalence figures for Camden residents only with 'broad', 'Feighner positive' and 'DSM–III–R positive' schizophrenia were: 3.7 per 1000, 2.0 per 1000 and 2.0 per 1000 resident population, respectively.

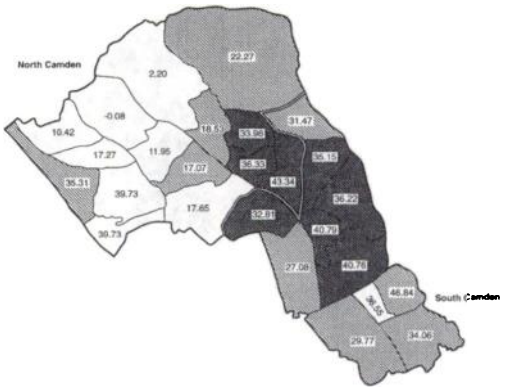


Fig. 1 Point prevalence of broad schizophrenia (per 1000 population) by electoral ward in Camden. □ 0–3.0, ■ 3.1–4.5, ■ >4.5. Numbers on map indicate Jarman-8 scores.

Geographical distribution of schizophrenia

Figure 1 is a map of Camden depicting the point prevalence of 'broad' schizophrenia within each electoral ward, based on 1985/1986 population estimates. The Jarman-8 score for each ward is superimposed. The range of prevalence for wards in the two halves of the borough was similar: 0.6 to 4.9 per 1000 population in the north and 2.0 to 6.8 per 1000 population in the south, but the average prevalence was higher in South Camden and consequently there were more wards with a very high density of schizophrenia. A marked and significant variation in prevalence was found for 6 of 26 electoral wards in Camden (Fig. 2). Three wards in South Camden had a significantly high point prevalence above the mean for Camden (Chalk Farm $P<0.01$; Camden, Caversham $P<0.001$) and three in North Camden had a significantly low point prevalence below the mean for Camden (Priory $P<0.05$; Swiss Cottage $P<0.01$; Frognal $P<0.001$).

Figure 3 illustrates the prevalence of 'DSM–III–R positive' schizophrenia by electoral ward and Fig. 4 shows those 11 wards in which there was a significant deviation of the prevalence from the mean using the Poisson model. Six wards with higher than predicted prevalence were all located in South Camden (Bloomsbury, King's Cross, Somers Town, $P<0.05$; St Pancras $P<0.01$; Camden, Caversham, $P<0.001$).

When the 136 patients living in group accommodation (homeless hostels, specialist mental health hostels, group homes, 'foster care schemes' and Part III homes) were excluded from the mapping exercise, there was a particularly large

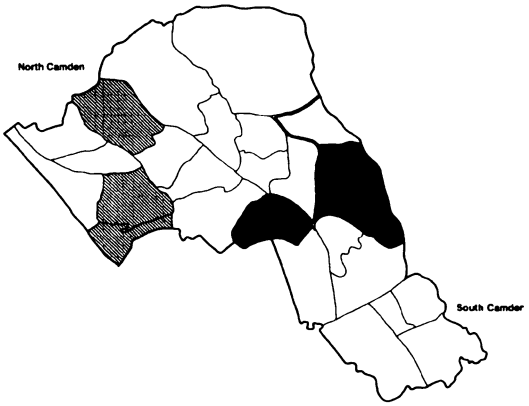


Fig. 2 Point prevalence of broad schizophrenia in Camden. ■ Significantly high prevalence, ■ Significantly low prevalence.

drop in prevalence whether broad or narrow diagnostic criteria were applied (by at least 50%) in three South Camden wards. Nevertheless, the significantly higher schizophrenia prevalence in South Camden compared with North Camden was retained (although the differential was somewhat eroded for broadly defined schizophrenia). Also the overall pattern of geographical variation was retained with significant deviation of prevalence both above and below the mean.

Comparison of North and South Camden residents with 'broad' schizophrenia

Residents with 'broad' schizophrenia in South Camden were more likely to be male (OR = 1.38,

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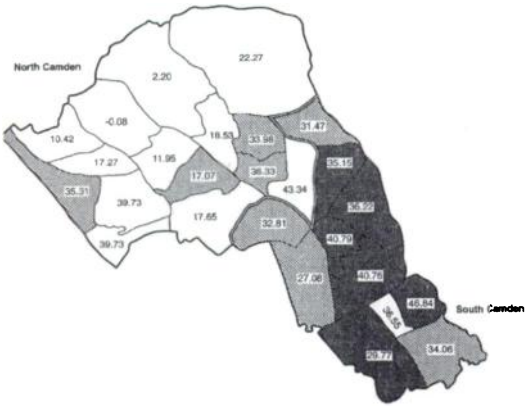


Fig. 3 Point prevalence of DSM–III–R schizophrenia (per 1000 population) by electoral ward in Camden. □ 0–1.5, ■ 1.6–3.0, ■ >3.0. Numbers on map indicate Jarman-8 scores.

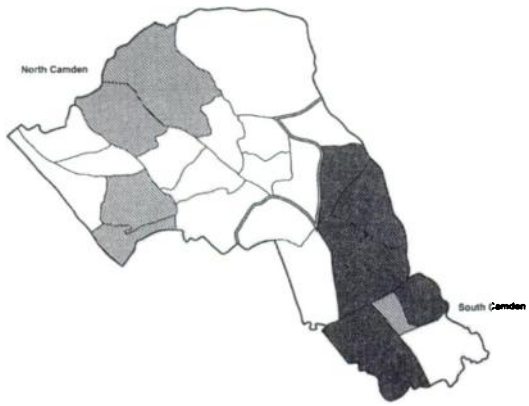


Fig. 4 Point prevalence of DSM–III–R schizophrenia in Camden. ■ Significantly high prevalence, ■ Significantly low prevalence.

95% CI 1.01–1.88, $\chi^2=4.45$, d.f. = 1, $P<0.05$) and older (median 46 *v.* 43 years, Mann–Whitney $Z=-2.09$, $P<0.05$) than their counterparts in North Camden. Although age of onset of illness was similar in the two groups, South Camden residents with schizophrenia had lengthier illness (median 17 *v.* 13 years, Mann–Whitney $Z=-3.29$, $P=0.001$). There were more residents in South Camden fulfilling Feighner (OR = 1.57, 95% CI 1.15–2.14, $\chi^2=8.61$, d.f. = 2, $P<0.05$) and DSM–III–R (OR = 1.89, 95% CI 1.32–2.72, $\chi^2=13.05$, d.f. = 1, $P<0.0005$) criteria for schizophrenia than in North Camden. More South Camden patients had tenuous links with the area (OR = 4.87, 95% CI 2.69–8.92, $\chi^2=40.74$, d.f. = 4, $P<0.0001$) and were resident in their current accommodation for less than one year (OR = 1.85, 95% CI 1.09–3.12, $\chi^2=11.73$, d.f. = 3, $P<0.01$) compared with North Camden patients, although proportions born in the United Kingdom were similar (63% and 66%, respectively).

Relationship between schizophrenia prevalence and socio-demographic variables

For the 698 patients resident in Camden and meeting the broader inclusion criteria for schizophrenia, using both Normal Linear Regression (NLR) and Logistic Regression (LR), unemployment was the best single predictor of schizophrenia prevalence within electoral wards (NLR: $t=4.74$, $P<0.0005$). In order to compare the predictive abilities of unemployment and the Jarman-8 score, predictions were made for each ward, based on regression models derived from the data for the remaining 25 wards; the mean absolute percentage errors of prediction for both variables were compared using both NLR and LR. Using either regression model, unemployment (33% or 35%) was only slightly better than the Jarman-8 score (34% or 36%) as a predictor variable. For example, using the unemployment rate in an NLR model resulted in a predicted prevalence of schizophrenia in each Camden ward varying on average from the actual prevalence by 33%.

For the subgroup of patients meeting Feighner criteria for positive or probable schizophrenia, there was little difference between the predictive abilities of unemployment (NLR: $t=3.29$, $P<0.005$), overcrowding (NLR: $t=3.32$, $P<0.005$) or the Jarman-8 score (NLR: $t=2.91$, $P<0.005$). However, the mean absolute percentage error of the predictions for all three variables was close to 50%. For the subgroup of patients meeting DSM–III–R criteria for schizophrenia, overcrowding was the single most powerful predictor (NLR: $t=3.97$, $P<0.0005$). In this case, the mean absolute percentage error of the predictions was almost 60% for overcrowding and 65% for the Jarman-8 score.

Since the use of socio-demographic variables derived from the National Census conducted at least four years before this study may have diminished the calculated predictive power, we also tested unemployment rates for the years in question (Department of Employment via GLC/London Research Centre). Of all the variables examined, this was the only one updated between Censuses available at electoral ward level. The mean absolute percentage error of the predictions for

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the prevalence of 'broad' schizophrenia in Camden using these data was 36% (NLR model).

Discussion

Prevalence of schizophrenia

A high point prevalence of schizophrenia was found in this London borough in comparison with an equivalent rural study (2.4 per 1000 resident population; McCreadie, 1982), whether prevalence figures were based on the 1981 Census or population estimates for the years in question (1985 and 1986). This holds true even on the most parsimonious interpretation of the diagnostic data in Table 1, that is, that all the individuals among the 22% with 'spectrum conditions' and the 3% with minimal data did not have schizophrenia. Application of other diagnostic systems for schizophrenia within this population (e.g. ICD–10 or DSM–IV) would be likely to produce different results according to the degree of overlap between systems (Helzer *et al*, 1981), allowing further characterisation of this patient population.

Our data are compatible with an inner city excess of schizophrenia. The Camden figures were comparable to the 1 year case register prevalence for Salford of 5.0 per 1000 resident population (Freeman & Alpert, 1986*b*) which included patients managed in primary care. The one year prevalence of DSM–III–R schizophrenia (3.3 per 1000 resident population) reported by Youssef *et al* (1991) was of a similar order to our findings, emphasising that lower rates in rural areas are not inevitable.

The prevalence figures for Camden residents only were an underestimate of all people in Camden with a diagnosis of schizophrenia since substantial cross-boundary flow exists between London boroughs. On the reasonable assumption of equivalent cross-boundary flow between Camden and neighbouring boroughs, the more accurate prevalence figures for the two districts were those derived from the total survey populations incorporating individuals living outside Camden yet using mental health services within the area. These latter figures also included long-stay in-patients admitted from Camden and homeless people with a diagnosis of schizophrenia using Camden services.

Methodological issues

Our methodology utilising key informants was both practical and feasible. Case identification included GPs and located 7% of people with schizophrenia who had never been admitted to hospital. A significant percentage of the community population (24%) were not known to specialist services. This emphasises the value of extending case identification outside hospital services.

Nevertheless, the present study is likely to have underestimated the true prevalence of schizophrenia for several reasons. First, identification of the subgroup of patients managed only in primary care was largely dependent on GPs' recollections. Second, some of the area social services reported that they had no clients with mental health problems, partly because they did not use the illness model. Third, the key informant methodology failed to identify those patients resident in Camden yet out of contact with all services at the census point. Particularly important were the homeless, whom we were unable to survey systematically apart from our contact with homeless person hostels. Fourth, the difficulties in applying research diagnostic criteria in a large community population (Harvey, accompanying paper) are likely to have led to an underestimate of those patients fulfilling diagnostic criteria for schizophrenia. However, a repeat census within North Camden identified that only about 10% of patients had been missed in the original survey (McNaught *et al*, personal communication).

Variation in the geographical distribution of schizophrenia

Within the relatively small geographical area of Camden there were marked and significant variations in the distribution of schizophrenia. While spatial variations in prevalence have been reported, few researchers have tested the statistical significance of these findings (Hare, 1956; Giggs, 1983; Youssef *et al*, 1991), a necessary prerequisite before a systematic search can be made for associated environmental or genetic factors.

We have already stated that variations in the underlying age distribution of the population did not account either for the finding of a higher schizophrenia prevalence in relation to a similar rural study, or for the variation in prevalence within this study area. The relatively few patients with schizophrenia (20%) living in group accommodation did not account for our overall findings, in contrast to the study by Goodman *et al* (1983). Although we are unable to state definitively whether an increased risk of schizophrenia in the African-Caribbean population (e.g. Harrison *et al*, 1988) could account for our findings with respect to schizophrenia prevalence, this is an unlikely explanation since only 4% of patients with schizophrenia in our survey were born in the West Indies.

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In the 1991 National Census (OPCS, 1991) fewer than 2% of the Camden population identified as black Caribbean.

Since the original work of Faris & Dunham (1939), two main explanatory hypotheses have been considered. First, that people with schizophrenia drift into city areas as a consequence of their illness or its prodrome (the 'geographical drift' hypothesis). Second, that factors in the city environment precipitate or perpetuate schizophrenia (the 'social causation' hypothesis; Lewis *et al*, 1992; Takei *et al*, 1992). In the present study significantly more patients fulfilling the Feighner and DSM–III–R criteria for schizophrenia were identified in the more characteristically inner city South Camden. Further, there were significantly more patients with tenuous links with the area. Both findings have important implications for service provision in inner city areas as well as indicating that both the 'social causation' and 'geographical drift' hypotheses may explain the particularly high point prevalence of schizophrenia in South relative to North Camden (Dauncey *et al*, 1993).

This study identified unemployment as the single best predictor of the prevalence of schizophrenia within electoral wards in Camden, when diagnosed by broader criteria. The Jarman-8 score performed almost as well, in contrast to other studies demonstrating that certain individual census variables accounted for a higher proportion of the variation in psychiatric morbidity than the Jarman-8 score (Thornicroft, 1991; Thornicroft *et al*, 1992; Kammerling & O'Connor, 1993). Our findings lend support to the suggestion that poverty might mediate variation in the incidence of schizophrenia (Giggs, 1983) and that unemployment is implicated in the variation in discharge rates for schizophrenia (Lomas *et al*, 1973).

There continued to be strong associations between the prevalence of schizophrenia and both unemployment and the Jarman-8 score when considering the more restrictive definitions of Feighner and DSM–III–R. Overcrowding was also highly associated with schizophrenia prevalence, particularly of patients fulfilling DSM–III–R criteria. High population density has been implicated as an intervening variable in the production of schizophrenia (Lomas *et al*, 1973; Takei *et al*, 1992). However, the predictive errors associated with any of the variables examined were much higher than those associated with variables predicting 'broad' schizophrenia. This suggests that point prevalence of patients with more narrowly defined schizophrenia, in an inner city borough, is not predicted reliably by socio-demographic factors. One possibility is that the broader definition of schizophrenia includes cases where social and environmental factors are more important in the genesis or maintenance of schizophrenic episodes. Alternatively, the findings may reflect differing tendencies, between those with 'broad' and those with 'narrow' schizophrenia, to drift down the social scale. However, people with more narrowly defined schizophrenia are generally considered to experience more social handicaps (in so far as they experience a more chronic illness) than those defined by broader criteria and are thus more at risk of drifting down the social scale. Finally, the failure to demonstrate a strong relationship between 'narrow' schizophrenia and socio-demographic factors may result from the difficulties in applying research diagnostic criteria already described (Harvey, accompanying paper).

Clinical and service implications

We have demonstrated that, although there may be highly significant associations between predictor variables and the prevalence of schizophrenia, the employment of such variables for service planning should take account of the degree of error associated with their use. The errors associated with the best predictors of schizophrenia defined by more restrictive criteria suggest that these variables would not be helpful in estimating the prevalence of 'narrow' schizophrenia. However, measures of social deprivation are likely to be helpful in predicting prevalence of schizophrenia defined by broad criteria. The latter patients are of most relevance to a district service. Our data support recent work (Turner & Haskins, 1993) arguing that social deprivation should be taken into account in capitation formulae for mental health, and highlight the need for additional services in deprived inner city areas. Furthermore, Kammerling & O'Connor (1993) were able to demonstrate a stronger correlation between psychiatric admissions and unemployment rates by grouping wards together in 'natural communities', compared to an analysis making use of individual electoral wards. Such an approach, requiring study areas of sufficiently large size, is likely to improve the prediction of schizophrenia prevalence by socio-demographic factors.

We conclude that, for the broader definition of schizophrenia, the unemployment rate and the Jarman-8 score may provide crude estimates of need for resource allocation in the planning of mental health services.

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Clinical implications

- The unemployment rate and Jarman-8 score are likely to be useful in predicting prevalence of schizophrenia defined by broad criteria.
- The use of socio-demographic variables for service planning should take account of the degree of error associated with their use.
- These findings highlight the need for additional mental health services in deprived inner city areas.

Limitations

- The true prevalence of schizophrenia is likely to have been underestimated due to under-identification of primary care patients.
- The key informant methodology failed to identify patients resident in Camden who were out of contact with services.
- The study area was too small for division into communities with similar socio-demographic features, potentially limiting the ability to identify predictors of schizophrenia prevalence.

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