Ethnicity and use of acute psychiatric beds: one-day survey in North and South Thames regions

JONATHAN KOFFMAN, NAOMI J. FULOP, DAVID PASHLEY and KEN COLEMAN

Background Previous studies have shown higher rates of psychiatric admissions, compulsory admissions, and diagnosed schizophrenia in Black ethnic groups compared with other population groups.

Method In a point-prevalence study, demographic and clinical data were collected for adult acute and low-level secure psychiatric in-patients in all National Health Service and seven private psychiatric units in North and South Thames regions on 15 June 1994.

Results A total of 3710 adult acute and 268 low-level secure psychiatric patients were surveyed; 75% of the patients were White, 16% were Black, and 4% were Asian. Analysis reveals that a high proportion of the Black population were admitted to a psychiatric unit; that Black patients are more likely to be admitted under Section; to be located in locked wards; have an in-patient diagnosis of schizophrenia; and not be registered with a general practitioner.

Conclusions These findings demonstrate the over-representation of Black ethnic groups within current psychiatric provision. The complement of services to all minority ethnic groups should be examined in terms of access, appropriateness and quality of care. Racism awareness and staff training need to be incorporated into mental health service provision as a matter of priority.

The prevalence of mental illness is often higher in different ethnic groups compared with the indigenous population among whom they settle. The main body of research to date has focused principally on the Afro-Caribbean population, with reports they have above average admission rates to psychiatric hospitals (Cochrane, 1977; Dean *et al*, 1981), high admission rates under the provisions of the Mental Health Act (1983), are over-represented in secure units and special hospitals (Davis *et al*, 1996), and lastly, have very high rates of diagnosed schizophrenia (Fernando, 1988). Explanations offered to account for these high rates remain controversial.

Following a recent one-day survey of adult acute and low-level secure psychiatric in-patients in the North and South Thames regions (Fulop *et al*, 1996) it was felt opportune to analyse further our large data set to test a long-held belief that a relationship exists between ethnicity and the use of acute psychiatric beds. The area surveyed covers 31 health authorities with a population of approximately 11 million adults. Fifty-four mental health providers serve the two regions. Seven private psychiatric units in North and South Thames were also included as the main recipients of mental health extra-contractual referrals from the London health authorities.

METHOD

Patient forms were completed by ward managers using clinical notes for all psychiatric in-patients in National Health Service (NHS) adult acute and low-level secure psychiatric units, and seven private psychiatric units in North and South Thames regions, on 15 June 1994. The data on the patient form comprised the patient's gender, age and ethnic group. Ethnicity data have been recorded by mental health trusts since 1993, although more explicit guidelines on the collection of self-assigned ethnicity have only recently been published (NHS Management Executive, 1994). In addition, data were collected on the patient's mode of admission to, and type of ward within, mental health units, as well as their primary diagnosis according to ICD–10 (World Health Organization, 1992).

We aggregated the Office of Population Censuses and Surveys (OPCS) (1994) ethnic groups to form three main categories as follows: 'White' including White UK, White Irish and White other; 'Black' including Black Caribbean, Black African and Black other; and 'Asian' comprising Indian, Pakistani and Bangladeshi. Our rationale for pursuing this approach stems from the possible inaccurate assignment of ethnic groups to patients by ward managers at a time when recording ethnicity in the NHS was not fully established.

Analysis

Patient forms were entered on a database and then analysed using the Statistical Package for the Social Sciences (SPSS-PC). Census data for North and South Thames regions were adjusted for age and gender to obtain a psychiatric in-patient admissions ratio for the ethnic groups represented in the population. Chi-squared tests were performed in order to demonstrate any associations between variables.

RESULTS

Survey coverage

We received confirmation from every NHS acute mental health unit and seven private units in North and South Thames regions that data were collected for all patients on the day of the census. The survey found a total of 3710 adult acute and 268 low-level secure in-patients. Using bed-base information provided by each mental health trust, we calculated that there were a total of 3868 adult acute and low-level secure beds available on the day of the census, indicating high bed occupancy levels.

Overall, of all the patients surveyed 75% (n=2978) were White, 16% (n=631) were Black, and 4% (n=160) were Asian. Of the 78 patients located in private hospitals, 23% (n=18) were Black or Asian.

Psychiatric in-patient admissions

Using 1991 census data, we calculated the psychiatric in-patient admissions ratio for the ethnic groups across the two regions. Table 1 shows that compared with White

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Table 1 Psychiatric in-patient admissions for ethnic groups of North and South Thames regions, adjusted for age and gender (total adult population n=10 832 839)

Ethnic groups	Population of ethnic groups	Proportion of total population	No. of psychiatric in-patients	Proportion of psychiatric in-patients (95% CI)	Psychiatric in-patient admissions ratio
White	9 903 938	91.4%	2978	75% (73.1–75.8)	83%
Black	403 142	3.7%	631	16% (14.7–16.9)	432%
Asian	388 569	3.6%	160	4% (3.4–4.6)	113%

and Asian population groups, after adjusting for age and gender, Black patients are over-represented in acute psychiatric units.

Mode of admission and location of patients

We found that nearly two-thirds (63.5%, n=399) of Black patients were compulsorily admitted under both Sections of the Mental Health Act (1983), compared with 38.8% (n=62) of Asian and 30.6% (n=907) of White patients. After controlling for clinical diagnosis this difference was still significant (χ^2=56.78, P<0.00001).

Low-level secure units accept patients who, for various reasons, cannot be managed on open wards because they present with aggressive and violent behaviour, are a potential danger to themselves, or require intensive nursing care. We found that of all Black patients surveyed, 10.5% (n=66) were located in low-level secure wards compared with 3.1% (n=5) of all Asian and 6.1% (n=182) of all White patients. This difference was significant (χ^2=19.41, P<0.001) (see Table 2).

General practitioner registration

There was a significant difference (χ^2=34.39, P<0.0001) in the proportion of acute psychiatric patients from different ethnic groups not registered with a general practitioner (GP); 11.3% (70) of Black patients were not registered with a GP, compared with 6.3% (185) of White and 5.0% (80) of Asian patients (Table 2).

Clinical diagnosis

We observed high rates of diagnosed schizophrenia in the Black in-patient population (71.2%, n=444) compared with White patients (36.0%, n=1062). There was also a high proportion (51.3%, n=82) of diagnosed schizophrenia in the Asian in-patient population (Table 2).

Frequency of psychiatric in-patient admissions

All three ethnic groups had similar rates of two or more previous psychiatric in-patient admissions in the 12 months prior to the survey. There was no evidence of any ethnic group being over-represented in the 'revolving door' effect of in-patient provision (Table 2).

DISCUSSION

This study presents a disturbing picture of the contact between the Black community and psychiatric services. A high rate of in-patient admissions for the Black population was found compared with the White and Asian populations, standardised for age and gender. Black in-patients surveyed were more likely to be admitted under Sections II and III of the Mental Health Act, to be located in locked wards, to have an in-patient diagnosis of schizophrenia, and not be registered with a GP. We also observed a large proportion of Asian patients with an in-patient diagnosis of schizophrenia. We now discuss each of these issues in more detail.

High psychiatric in-patient admission rate

Although the Black population accounts for 3.7% of the total population of the North and South Thames regions, they nevertheless represented a large proportion (16%) of the psychiatric in-patients surveyed. The psychiatric in-patient admissions ratio for the Black population across the two regions was calculated as 432%, more than four times that of the White population. This supports findings from other studies (Cochrane, 1977; Dean *et al*, 1981).

Mode of admission

Access for a high proportion of Black in-patients to psychiatric units across both Thames regions came within the provisions of the Mental Health Act 1983. A number of interrelated explanations have been advanced to account for these high rates. It has

Table 2 Patient characteristics for ethnic groups in North and South Thames regions

Patient characteristics	White (n=2978)	Black (n=631)	Asian (n=160)	χ^2 (d.f., P value)
Formally admitted under Sections II & III of the Mental Health Act (1983)[1]	30.6%	63.5%	38.8%	236.50 (3, P<0.0001)
Located on low-level secure ward	6.1%	10.5%	3.1%	19.41 (3, P<0.001)
Not registered with a GP[2]	6.3%	11.3%	5.0%	34.39 (6, P<0.001)
In-patient diagnosis of schizophrenia[3]	36.0%	71.2%	51.3%	318 (24, P<0.0001)
Two or more previous psychiatric in-patient admissions in past 12 months[4]	23.3%	25.2%	22.0%	NS

1. Missing data n=32.
2. Missing data n=40.
3. Missing data n=85.
4. Missing data n=112.

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been suggested that the culture of Black people means that they are more susceptible to being identified by lay people and the police because they express their social distress in a culturally determined manner (Littlewood & Lipsedge, 1982). It has also been suggested that the manifestation of mental illness predisposes Black people towards police arrest because they present in a particularly violent way (Harrison *et al*, 1984). The location where this behaviour occurs is also considered to be important. According to Bean (1986), if the greater part of young Black people's social life takes place in public, then mental illness is more likely to be detected and dealt with by agents such as the police, compared with White people who it is argued have a more indoor culture.

GP registration

A significant proportion of Black in-patients were recorded as not registered with a GP. Other research has also demonstrated lower rates of GP registration in Black ethnic groups, particularly African–Caribbean males, compared with other ethnic groups and the overall population (Health Education Authority, 1994). One possible consequence is that Black patients do not present with mental health problems until it is too late to prevent in-patient admission. The *Richie Report on the Care and Treatment of Christopher Clunis* (Richie *et al*, 1994) recommended that before any patient with a psychiatric history is removed from a GP's list, provisions must be made to ensure the patient is registered with a new GP as soon as possible.

Diagnosis of schizophrenia

Much interest has focused recently on the extent of schizophrenia among ethnic minorities in Britain, particularly the Black population. In line with other published research (Fernando, 1988), we observed more Black patients than expected with an in-patient diagnosis of schizophrenia. We also observed high rates of diagnosed schizophrenia in the Asian patient population. Hospital admissions for schizophrenia in people from the Indian subcontinent have been reported as being both higher (King *et al*, 1994) and lower (Harvey *et al*, 1990) than those in the base population.

Explanations of these high rates are varied. The process of immigration is often felt to be a stressful life event which may precipitate mental illness. The link between poverty and schizophrenia has also been recognised for several years, although the direction of causation is less clear. A genetic basis for schizophrenia has been suspected as the diagnosis is made much more frequently in close relatives than would be expected by chance (Gurling, 1988). Misdiagnosis has also been suggested, as a result of the ethnocentric view of Western psychiatry (Sashidharan, 1988). Lastly, the Black community argues that there is evidence of racism in psychiatry, highlighted by the controversial diagnosis of "cannabis psychosis" (McGovern & Cope, 1987).

Limitations of study

Of all sociodemographic characteristics considered, 'ethnicity' has been described as one of the most controversial (Senior & Bhopal, 1994). This study recognises the inherent difficulties and potential limitations in assigning ethnicity to an individual. In common with others, however, we argue that collection of these data is vital in order to identify disadvantage due to cultural differences in the use and provision of health services.

We compared our 1994 survey population with that of the 1991 Census data, and it is possible that the overall baseline population for the two regions could have changed in the intervening years. Importantly, the population census figures for the population of the North and South Thames regions may not be accurate. It is estimated that between 0.57 and 2% of the overall population may have avoided being enumerated (London Research Centre, 1992). It is possible that this figure may be higher for younger non-White males in metropolitan areas (Office for Population Censuses and Surveys, 1994), although comparisons with data from the 1989–91 labour force surveys suggest that any ethnic bias in rates of under-renumeration would not be significant (Teague, 1993). Nevertheless, if comparisons are made this must remain a source of concern.

We were unable to take into account socio-economic status since this information was not recorded in the patients' clinical notes. If it had been possible to apply this control to the data, a different picture might have emerged. Lastly, medical notes are often incomplete and may be inaccurate, especially regarding clinical diagnosis. Prospective studies using more stringent inclusion criteria have been carried out elsewhere with smaller survey populations (King *et al*, 1994).

CONCLUSIONS

Many factors have been suggested as contributing towards the problem of the overrepresentation of Black ethnic groups within the mental health system. Diagnosis, care, support and treatment can have a controlling and repressive effect, in addition to high rates of commital under both civil and criminal detention clauses of the Mental Health Act as found in this survey. We believe that these problems might, in part, be a reflection of Black people's position in society, being subject to institutional racism. Poverty is another closely related issue that might affect the prevalence and nature of mental health problems in minority ethnic groups. Although these issues are generally beyond the scope of the NHS to influence, there are still a number of courses of action we believe should be pursued. Psychiatrists and their teams, service managers and purchasers need to examine the complement of mental health services for Black and minority groups in terms of the following:

(a) Access – who are receiving which mental health services and by what process?

(b) Appropriateness and quality – what types of mental health services are being provided, and do they meet the needs of all the ethnic groups in the local population?

In addition, there has been a considerable increase in the number of sectorised community-based teams who deliver mental health services provision. The care of patients from Black and ethnic groups frequently falls upon these teams, many of whom operate in inner-city areas. This opportunity, however, should allow them to devise a coordinated approach to tackling some of the issues highlighted in this paper. Teams need to examine their procedures for compulsory admission, including an attempt to improve liaison with other professional groups and the police. The potential for discriminatory practices, both overt and covert, must be openly discussed and then addressed at all staff levels through training and racism awareness. Imaginative ways of winning the confidence and support of patients and families might overcome some of the hurdles. Patient advocacy must be encouraged to negotiate more meaningfully the process of care and treatment on behalf of all psychiatric in-patients.

In terms of future research, more detailed analyses of patient samples that

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consider differences in economic circumstances are vital. This would help elucidate whether or not particular cultures have a protective effect, or whether ethnicity combined with privation, isolation and discrimination put people at greater risk. This area of health-care provision remains a source of concern.

CLINICAL IMPLICATIONS

- Health-care professionals need to examine their procedures for compulsory admission, including an attempt to improve liaison with other professional groups and the police.
- The potential for discriminatory practices must be openly discussed and then addressed at all staff levels through training and racism awareness.
- Imaginative ways of winning the confidence and support of patients and families might overcome some of the hurdles.

LIMITATIONS

- 1991 census figures for the population of the North and South Thames regions may be inaccurate.
- There is evidence that low social class influences psychiatric hospital admissions, but we were unable to take into account socio-economic status as data were not available.
- Medical notes are often incomplete and may be inaccurate, especially regarding clinical diagnosis.

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JONATHAN KOFFMAN, MSc, Kensington & Chelsea and Westminster Health Authority, London; NAOMI J. FULOP, PhD, London School of Hygiene and Tropical Medicine; DAVID PASHLEY, MA (Cantab), KEN COLEMAN, North Thames Region Health Authority, London

Correspondence: Jonathan Koffman, Department of Public Health, Kensington & Chelsea and Westminster Health Authority, 50 Eastbourne Terrace, London W2 6LX

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