

Original Paper

The London Survey of Psychiatric Intensive Care Units: psychiatric intensive care; patient characteristics and pathways for admission and discharge

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Abstract

Background: Psychiatric intensive care facilities have previously been poorly defined, with uncertainty existing about the appropriateness of admissions.

Aim: To offer the first large-scale systematic survey describing the clinical characteristics of patients admitted to Psychiatric Intensive Care Units.

Method: A questionnaire was sent to ward managers of every Psychiatric Intensive Care Unit in London for completion on a chosen census day. Individual demographic and clinical patient characteristics were collected, along with admission and discharge pathways.

Results: Of 186 patients on 17 NHS PICUs in London, we obtained data for 172. 80% of patients were male, with a mean age of 33; 50% were Black and all but 2 were involuntarily detained. 66% had a diagnosis of schizophrenia and 55% of admissions were due to physical aggression. 73% of the sample had at least one 'complex need', which was most commonly substance misuse. Black patients were younger, more likely to be male and to have a forensic history (54% vs. 31%) than white patients. A slightly lower percentage (70% vs. 79%) of Black patients were described as having complex needs. White patients were more likely to have a personality disorder or a second diagnosis.

Conclusions: Patients admitted to psychiatric intensive care units were most likely to have major psychosis, complex needs and to use illicit substances. Ethnic variations warrant further study.

Declaration of Interest: The project was partly funded by the Department of Health.

Keywords

PICUs; patient characteristics; care pathways

INTRODUCTION

Over the last few years a modest body of research has emerged documenting characteristics of PICU populations. Patients admitted to PICUs are often

young, male (Rachlin, 1973), acutely psychotic (Gordon, 1998), most often admitted due to aggression (Barlow, 2000) and have short lengths of stay (Goldney et al., 1985).

Despite this, comprehensive data describing patients admitted to PICUs remains incomplete. Most key studies have focussed on individual units, making it difficult to judge how representative of typical populations they are. Ford and Whiffin

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(1991) found that patients admitted to PICUs differed considerably between solely acute, chronic or forensic patients, or a mixture of all three. Studies are spread thinly between countries and continents (particularly the UK, US and Australia), where the structure of mental health services and the characteristics of the patients who use them varies immensely. The comparability of findings is further hindered by a diversity of study designs (Maden, 2001).

This paper reports on the most comprehensive survey of the Psychiatric Intensive Care population to date. We present the first thorough investigation of PICU patient characteristics across a large urban area, London, discussing clinical implications and care pathways.

METHODS

Questionnaire design

Having received MREC ethical approval, we conducted a postal questionnaire study that sought information from ward managers on all London's PICUs. Details of the design of the questionnaire, identification of the sample populations, and data collection procedures have previously been outlined (Pereira et al., 2005a). Ward managers completed the questionnaire giving data on every patient resident on their PICU on the chosen census day, 12th June 2001. The identity of patients was confidential.

The areas for data collection were: demographic (age, gender, ethnic group, marital and employment status), reasons for admission (adapted from criteria used by Coid et al., 2001), section status, primary and secondary diagnoses ICD-10 (working 'clinical diagnosis' from ward-specific psychiatric assessment), and number of prescribed antipsychotics.

We asked about 'complex needs' using criteria outlined by Atakan (2001): 'presence of severe mental illness plus one of the following: another mental health problem, substance abuse, mild learning difficulty, history of abuse, medical problems, homelessness, lack of social support'.

'Multiple problems' were defined as the presence of multiple diagnoses, multiple reasons for admission, multiple complex needs, or the use of more

than two concurrent anti-psychotics in a patient's treatment plan.

Details of psychiatric history included the number of previous mental health admissions in the last 12 months and the total number of previous PICU admissions. Details of forensic history were obtained on the basis of patients' most serious past offence and criminal offences associated with admission. We also asked ward managers which facility would be most suitable for patients once they were ready for discharge.

Statistical analysis

Statistical analysis was conducted using SPSS 10.0. Descriptive Data are tabulated as actual numbers and valid percentages (denominators of complete data). Statistical analyses to assess ethnic variations included parametric t tests for normally distributed data or non-parametric X^2 and Fisher's Exact tests.

RESULTS

The sample

Of 185 patients on 17 NHS PICUs, data were obtained for all but 10 patients from a single London Unit. Data from one other unit omitted to report on diagnoses (16 patients). 86% of patient data was full & complete (159 out of 185).

Demographic characteristics

The PICU sample was predominantly male, with only 35 female patients (20%). Most were aged within the 25–34 or 35–49 categories (range 16–59). Their mean age was 33 years. 86% were single, 8% divorced or separated, and the remainder (9 patients) currently married or in long-term relationships. 96% were unemployed prior to admission. The 7 employed patients worked in a range of different jobs from managerial or technical positions to unskilled manual work. Demographics are summarised in Table 1.

Table 2 shows the ethnic origin of PICU patients, in comparison to projected London figures from the 2001 Census (ONS, 2002). Black Caribbean patients are markedly over-represented (8 times the expected numbers). Black Africans are almost 3 times more prominent than in the general population, and Black people from 'Other'

Table 1. Demographic characteristics

		Total N = 176 (%)
Gender	Male	141 (80)
	Female	35 (20)
Age	Under 18	3 (2)
	18–24	35 (20)
	25–34	64 (36)
	35–49	64 (36)
	50–65	10 (6)
	Mean	33
Marital status	Single	152 (86)
	Married/LTR	9 (5)
	Div/Sep	15 (8)
	Widowed	0
Occupation	Manag/tech	1 (1)
	Sk non-man	1 (1)
	Skill man	2 (1)
	Unskill man	2 (1)
	Other	1 (1)
	Unemployed	169 (96)

origins are almost twice as prominent in PICUs. In contrast, patients of White or Indian sub-continent origins are under-represented, with just over half the presence in PICUs of that found in the general London population.

Clinical characteristics (Table 3)

Reasons for admission: 56% of patients (n = 99) were admitted to PICUs due to physical aggression towards others or property, and the second most common reason for admission was crisis/relapse, at 14% (n = 25).

Section status: All but 2 PICU patients were detained under the Mental Health Act. 67% (n = 118) were held under section 3, 14% (n = 25) under Section 2. A substantial proportion (17%, n = 30) were held under forensic sections, most commonly Section 37 of the Mental Health Act 1983, (hospital order via the court) or 37/41 (hospital order with restriction order).

Diagnoses: Schizophrenia spectrum was the most common primary diagnosis (66%, n = 105), followed by mood or affective disorders (16%, n = 26). Personality disorders (PD) and mental/behavioural substance misuse also made up a small proportion of the PICU population (6%, n = 10 and 5%, n = 8 respectively). A further 9 patients had a secondary diagnosis of PD, bringing the

Table 2. London PICU ethnicity vs. London census projections (ONS, 2001)

	2001 census projections London ethnicity%	PICU N = 176 (%)
White	72.2	68 (38.6)
Black Caribbean	4.0	58 (33.0)
Black African	4.8	23 (13.1)
Black Other	2.3	7 (4.0)
Indian	5.8	5 (2.8)
Pakistani	2.1	2 (1.1)
Bangladeshi	2.0	4 (2.3)
Chinese	0.9	1 (0.6)
Other	5.5	8 (4.5)

total PD population in PICUs to 11%. Prevalence of other primary ICD-10 disorders was very low (total of 6%, n = 10). One patient had no formal diagnosis, being in the process of assessment.

Complex needs: Using Atakan's (2001) definition of complex needs, prevalence was reported as being very high, at 73% (n = 128). The most prevalent need in addition to mental health problems was 'substance misuse' (53%, n = 68), followed by 'challenging behaviour' (13%, n = 16), and 'homelessness' (11%, n = 14). Also present were 'mild learning disability', 'history of abuse', 'medical problems' and 'lack of social support', each at 5%.

Multiple problems: 50% of the sample (n = 88) showed multiple problems in their clinical profiles. 30% (n = 48) had a secondary diagnosis. 27% (n = 47) had 2 or more reasons for admission, 18% (n = 32) had 2 or more complex needs, and 20% (n = 35) were on more than 2 antipsychotics.

Mental health and forensic history

66% (n = 116) of patients had previously been admitted to PICU (mean 2.4 PICU admissions). 53% (n = 94) had been admitted to a mental health ward previous to their current admission in the 12 months leading up to the census day. A high proportion of patients (44%, n = 75) had a forensic history with 67% (n = 50) of these having a history of violent offences (Table 4).

Discharge directions

The most common route of discharge for PICU patients was to acute psychiatric wards (35%,

Table 3. Clinical characteristics

	White N = 68 (39%)	Black N = 89 (51%)	Other N = 19 (11%)	Total N = 176
Reason for admission				
physical aggression to others/property	34 (50)	53 (60)	12 (63)	99 (56)
Crisis/Relapse	10 (15)	15 (17)	0	25 (14)
Non-compliance/Absconding	11 (16)	7 (8)	5 (26)	23 (13)
Self-Harm	6 (9)	1 (1)	0	7 (4)
Other	7 (10)	13 (15)	2 (11)	22 (13)
Primary diagnosis¹				
Schiz spectrum disorders	35 (55)	56 (73)	14 (74)	105 (66)
Mood/affective disorders	12 (19)	12 (16)	2 (11)	26 (16)
Personality Disorders	8 (13)	1 (1)	1 (5)	10 (6)
Other	9 (13)	8 (9)	1 (5)	18 (11)
Presence of 2nd diagnosis of which:				
Substance Misuse	27 (42)	18 (23)	3 (16)	48 (30)
Personality Disorders	7 (26)	11 (61)	1 (33)	19 (40)
Schizophr. spectrum disorders	9 (33)	1 (6)	1 (33)	11 (23)
Other	5 (19)	2 (11)	1 (33)	8 (17)
Other	6 (22)	5 (6)	0	10 (21)
Presence of complex needs of which:				
Substance Misuse	54 (79)	62 (70)	12 (63)	128 (73)
Challenging behaviour	24 (44)	39 (63)	5 (42)	68 (53)
Homeless/Lack social support	7 (13)	6 (10)	3 (25)	16 (13)
Other (8 categories)	8 (15)	10 (16)	2 (17)	20 (16)
Other (8 categories)	15 (28)	7 (11)	2 (17)	24 (19)

¹For diagnosis N = 159 because of missing values. Other diagnoses included organic, substance misuse, neurotic, LD, behavioural, emotional, unspecified.

n = 61), followed by supported/hostel accommodation (20%, n = 36), long stay low secure units (11%, n = 19), and rehabilitation wards (7%, n = 13). Discharge to medium secure facilities or specialist facilities was very low (each at 4% of the total PICU sample), and none were identified as suitable for discharge to a special hospital. The remainder were reported suitable for discharge to their own homes, community forensic teams, or for transfer back to prisons (Table 4).

Substance misuse

As shown in Table 3, substance misuse was the most common complex need in PICU patients. 41% of patients (n = 72) showed substance misuse as part of their clinical profile (i.e. either primary or secondary diagnosis, or complex need). However, only 11% of patients (n = 19) had substance misuse as a formal diagnosis.

Patients with substance misuse tended to be younger than the overall PICU population (mean age 30 years), and 54% (n = 38) had a forensic history. However, there were no differences from the overall sample regarding type of offence or Section status. Patients with substance misuse were less likely to have had previous mental health admissions in the

last 12 months (3.1 vs. 1.4 admissions). They were more likely to be discharged directly to the community or in a few cases, to prisons.

Physical Aggression

Physical Aggression was the most common reason for admission to PICU, with 65% of patients (n = 109) showing physically aggressive behaviour as part of their clinical profile (including reason for admission or violent forensic history). This group of patients showed no significant demographic or clinical differences from patients without physically aggressive histories. As shown in Table 4, 67% (n = 50) of offences committed by PICU patients were violent. These included assault (20%, n = 15), actual bodily harm (17%, n = 13), grievous bodily harm (20%, n = 15) and attempted murder (<1%, n = 1).

Comparison between patients of Black or White ethnic origin

Patients in London PICUs were more likely to be Black than White. White patients were likely to be older than Black patients (36 years vs. 32 years), fewer Black patients were female, compared with White (14%, n = 12 vs. 32%, n = 22).

Table 4. History and discharge directions

	White N = 68 (39%)	Black N = 89 (51%)	Other N = 19 (11%)	Total N = 176
Admissions in past 12m:				
At least 1 other admission	36 (53)	47 (53)	11 (58)	94 (53)
None/unknown	25 (37)	34 (38)	7 (37)	66 (38)
Long Term Care	7 (10)	8 (9)	1 (5)	16 (9)
Presence forensic history: Of which:				
Non-violent offences	7 (33)	8 (17)	2 (25)	17 (23)
Violent offences	12 (57)	33 (72)	5 (63)	50 (67)
Fire related/Sexual offences	2 (10)	5 (11)	1 (13)	8 (11)
Anticipated discharge directions:				
Community ¹	16 (24)	16 (18)	4 (21)	36 (20)
Acute ward/Rehab ward	27 (40)	40 (45)	7 (37)	74 (42)
PICU	5 (7)	11 (12)	2	18 (10)
LSU	6 (9)	4 (5)	3	19 (11)
RSU/Prison	9 (13)	8 (9)	3 (16)	20 (11)
Other	5 (7)	4 (5)	0	9 (5)

¹Discharge to 'Community includes: Independent Accommodation, Supported Housing or Hostel Accommodation.

Schizophrenia spectrum remained the most common diagnosis in both Black (73%, $n = 56$) and White (55%, $n = 35$) patients. 17 of the 19 patients with a primary or secondary diagnosis of PD were White, with the remaining 2 of Black Caribbean origin. Secondary diagnoses were present in only 23% ($n = 18$) of Black patients, significantly lower than the 42% ($n = 27$) prevalence found in White patients ($F = 7.5$, $p = 0.02$). Although Black patients were more likely to have substance misuse as part of their clinical profile ($n = 24$, 35% vs. $n = 43$, 48%), this trend was not significant. Presence of complex needs, two or more reasons for admission, number of antipsychotics prescribed or number of complex needs identified did not differ significantly between the two groups, although Black patients tended to be described as having fewer complex needs.

Forensic profiles differed substantially between the two groups: 54% of Black patients ($n = 46$) had forensic histories, compared with 31% ($n = 21$) of White patients. The 2 informal patients in the PICU sample were both White. No significant differences were found for history of previous admissions, reasons for current admission or facility considered most suitable for transfer.

DISCUSSION

The data describe a number of key features belonging to this group of patients who require

intensive input above and beyond what can be provided in open adult psychiatric wards.

The typical PICU patient

The characteristics of a typical London PICU patient are shown in Figure 1. Patients were identified as likely to be male, young (mean age 33), belonging to an ethnic minority, with a diagnosis of schizophrenia, involuntarily detained (mostly under section 3 MHA, 1983), known to mental health and PICU services, admitted due to violence, often showing a violent forensic history, and presenting with at least one complex need.

The relatively young age of PICU patients in our survey was consistent with previous literature, which has repeatedly identified PICU patients as younger than populations in general adult psychiatric wards (Rachlin, 1973; Khan et al., 1987). However, the predominance of male patients (80%) is higher than found in many other UK studies which report between 60–70% of patients as being male (e.g., Smith, 1997; Hyde et al., 1998).

Reasons for the predominance of young male patients in PICUs may be the association with physically aggressive behaviour. In this survey, along with other previous research (e.g. Barlow, 2000), physical aggression is identified as the most common reason for admission to a PICU. It follows that the patients referred to the PICU by open wards, and the patients viewed as suitable by

Male
33 years
Single & Unemployed
Not White
Admitted due to violence
Section 3
Schizophrenia spectrum
1 previous Mental Health (MH) admission in the last 12 months
2 previous PICU admissions
At least 1 complex need, most often substance misuse
Stay under 8 weeks
Discharged to acute wards

Figure 1. *Typical London PICU patient*

PICU staff, are those considered to pose the greatest threat of aggressive behaviour which cannot be contained adequately. Due to their perceived strength and fitness, this is more likely to be the case for young, male patients, particularly those showing florid psychotic symptoms. A population of female patients (20%, $n = 35$) also clearly exists within PICUs, possibly with their own discrete clinical and behavioural characteristics. However due to limited sample sizes, gender differences were not assessed in this study, this area could be explored in future work.

The National Minimum Standards for PICUs (DoH, 2002), recommend that patients should be detained under a section of the Mental Health Act (1983) in order to be detained on PICU. This was true for all but two (1%) of the PICU patients in our sample.

‘Forensic’ patients

The finding that forensic sections are present in 17% of the London sample deserves to be explored in more detail. This means that more than one in six PICU patients may be considered to be a mentally disordered offender. Our results also show that patients with forensic histories are likely to be violent offenders, most often committing assault, ABH or GBH. It appears from these

findings that PICUs are performing a role that accommodates patients from the criminal justice system alongside patients referred from psychiatric services.

Multiple problems, complex needs and substance misuse

Our findings around multiple problems and complex needs suggest that the profiles of London PICU patients are far from simple. 50% ($n = 88$) showed multiple problems in their clinical profiles (i.e. secondary diagnoses, 2 or more reasons for admission or 2 or more complex needs). With regards to reason for admission, most patients with multiple problems showed violence along with absconding and/or non-compliance with medication. With regard to complex needs, multiple problems most often included ‘substance misuse’ and ‘homelessness’. Secondary diagnoses were likely to include personality disorder or substance misuse co-morbid with schizophrenia.

The degree of substance misuse among PICU patients remains somewhat unclear, due to the discrepancy between formal diagnoses of the problem (11% of total sample, $n = 19$) and the number of patients identified as having substance misuse as a complex need (39% of total sample, $n = 68$). Substance misuse is often reported to be under diagnosed in psychiatric patients (Montoya et al., 2000), with many clinicians instead diagnosing a schizotypal episode triggered by substance misuse. Also, the degree of morbidity required to warrant a complex need of ‘substance misuse’ is unclear. Although ward managers’ judgements may be considered a somewhat subjective measure, treatment decisions are likely to be influenced by these judgements. The authors suggest that the clinically relevant figure lies somewhere between the number of patients diagnosed (11%) and the number implicated (39%).

Incomplete interventions received by patients with complex needs (particularly dual diagnoses) often result in frequent relapses, and the perpetuation of a ‘revolving door’ scenario (Atakan, 2001). This suggests that individually tailored interventions to cater for the complex needs of patients would be beneficial. The presence of substance misuse as a major complex needs issue in London

PICU patients illustrates the need to explicitly address substance misuse issues within the PICU environment. This could include staff training, psycho-education for patients and good links with specialist services for referrals and shared care opportunities.

Over-representation of Black patients

There are numerous theories regarding the overrepresentation of Black patients in psychiatric services, encompassing issues of social disadvantage, racism, differing pathways to care, differing beliefs and attitudes towards hallucinatory experiences, use of illicit drugs, and psychological theories such as attributional style and interpretation of life events (see Sharpley et al., 2001).

In our survey, 50% of all London PICU patients were Black, almost 5 times the prevalence of Black people in London. This over-representation was visible throughout London Trusts, even those with a low proportion of ethnic minorities within their boroughs.

Black patients were found to be a mean 4 years younger than White patients, and were more likely to be male. Black and White patients were similar in terms of their employment and marital status, most being single and unemployed. This suggests that these may be areas of concern for the PICU population, regardless of ethnicity. The reported tendency for substance misuse to be more commonly present in Black patients merits further investigation.

Our survey found that Black patients were more likely than White patients to have been diagnosed with a schizophrenia spectrum disorder. There was a higher prevalence of Personality Disorder in White patients ($n = 17$ vs. $n = 2$), and a lower prevalence of secondary diagnoses in Black patients ($n = 18, 23\%$ vs. $n = 27, 42\%$), supporting previous evidence (e.g. Coid et al, 1999). There has been much debate regarding the impact of cultural differences on the diagnosis and treatment of schizophrenia (e.g., Hickling et al., 1999). Some studies have found ethnic differences in the frequency of hallucinatory experiences in the general population, with Black Caribbean participants being 2.5 times more likely to report having

experienced hallucinations than White participants (Johns et al., 2002). However, the idea that psychiatrists may be more likely to attribute culturally different styles of communicating distress to symptomatology associated with psychosis is also well recognised (see Hickling et al., 1999).

In our survey, Black patients were less likely to have been described as having complex needs, their admissions more often being related to forensic histories. It appears that Black patients are more likely to enter PICUs from forensic services, with White patients more often entering from general psychiatric services. Could the courts and psychiatrists be over-estimating the risk associated with Black people suffering from mental illness, even in the absence of complex needs? Lewis et al. (1990) found that psychiatrists judging clinical vignettes rated Black patients as showing greater risk of violence to staff and their families than White patients, despite race being the only variant in the case examples. The effect was much more prominent in male patients than females, which could suggest an elevated risk perception on London psychiatric wards referring to PICU for young, Black, male patients. This would support Thornicroft et al.'s (1999) suggestion that a kind of progressive filtering is occurring which results in Black people becoming progressively overrepresented in higher levels of secure psychiatric care.

With the high proportion of ethnic minorities within Psychiatric Intensive Care Units, it is essential that clinicians are aware of, and take into account, the well established literature on culturally-relevant beliefs, attitudes and communication styles in order to provide an adequate, well-rounded service for our client group.

CLINICAL IMPLICATIONS OF THIS SURVEY

- The study confirms that Black patients are substantially over-represented in PICUs, although the reasons for this remain unclear.
- PICUs should develop the links and expertise to effectively address issues of substance misuse within their patient population.
- Multidisciplinary therapeutic input on PICU is vital in order to address the complex needs that many patients present with.

LIMITATIONS OF THIS SURVEY

- Some patient data (n = 21) was collected retrospectively, compromising the uniformity of cross-sectional census day data collection.
- Degree of morbidity required to merit a 'complex need' was undefined, risking subjectivity in reported needs of patients.
- The use of non-parametric tests (due to categorical data collection variables) reduced the power of statistical analyses.
- Survey relied on ward managers' views, which have an element of subjectivity, for example, on suitability for discharge, suitability of future placement.

Acknowledgements

The authors acknowledge the invaluable assistance of Roland Dix, Gloucestershire Partnership NHS Trust; Dr Paul McCrone, Institute of Psychiatry; Professor Graham Thornicroft, Institute of Psychiatry.

References

- Atakan, Z.** (2001) The complex needs patient. In: *Psychiatric Intensive Care*. Beer D, Pereira P, Paton C (eds). London: Greenwich Medical Media, pp. 169–196.
- Audini, B. and Lelliott, P.** (2002) Age, gender and ethnicity of those detained under Part II of the Mental Health Act 1983. *British Journal of Psychiatry*. 180: 222–226.
- Barlow, K., Grenyer, B. and Ilkiw-Lavelle, O.** (2000) Prevalence and precipitants of aggression in psychiatric inpatient units. *Australian and New Zealand Journal of Psychiatry*. 34: 967–974.
- Bhugra, D., Leff, J., Mallett, R., Der, G., Corridan, B. and Rudge, S.** (1997) Incidence and outcome of schizophrenia in Whites, African-Caribbeans and Asians in London. *Psychological Medicine*. 27(4): 791–798.
- Brown, G.W. and Prudo, R.** (1981) Psychiatric disorder in a rural and an urban population: 1. Aetiology of depression. *Psychological Medicine*. 11(3): 581–599.
- Coid, J., Kahtan, N. and Gault, S.** (1999) Patients with personality disorder admitted to secure forensic psychiatry services. *British Journal of Psychiatry*. 175: 528–536.
- Coid, J., Kahtan, N., Cook, A., Gault, S. and Jarman, B.** (2001) Predicting admission rates to secure forensic psychiatry services. *Psychological Medicine* 31: 531–539.
- Ford, I. and Whiffin, M.** (1991) The role of the psychiatric ICU. *Nursing Times*. 87(51): 47–49.
- Goldney, R., Bowes, J., Spence, N., Czechowicz, A. and Hurley, R.** (1985) The psychiatric intensive care unit. *British Journal of Psychiatry*. 146: 50–54.
- Gordon, H.** (1998) Special care units in special hospitals. *The Journal of Forensic Psychiatry* 9(3): 571–587.
- Hickling, F.W., McKenzie, K., Mullen, R. and Murray, R.** (1999) A Jamaican psychiatrist evaluates Diagnoses at a London psychiatric hospital. *British Journal of Psychiatry* 175: 283–285.
- Hyde, C.E., Harrower-Wilson, C. and Morris, J.** (1998) Violence, Dissatisfaction and rapid tranquillisation in psychiatric intensive care. *Psychiatric Bulletin*. 22: 477–480.
- Johns, L.C., Nazroo, J.Y., Bebbington, P. and Kuipers, E.** (2002) Occurrence of hallucinatory experience in a community sample and ethnic variations. *British Journal of Psychiatry*. 180: 174–178
- Khan, A., Cohen, S. and Stowell, M.** (1987) The therapeutic role of a PICU in acute psychosis. *Comprehensive Psychiatry*. 28(3): 264–269.
- Lelliott, P., Wing, J. and Clifford, P.** (1994) A national audit of new long-stay psychiatric patients I: method and description of the Cohort. *British Journal of Psychiatry*. 165: 160–169.
- Lewis, G., Croft-Jefferies, C. and David, A. et al.** (1990) Are British psychiatrists racist? *British Journal of Psychiatry*. 157: 410–415.
- Maden, A.** (2001) Medium secure care and research in forensic psychiatry. *British Journal of Psychiatry*. 178: 5–6.
- Montoya, I.D., Svikis, D., Marcus, S.C., Suarez, A., Tanielian, T. and Pincus, HA.** (2000) Psychiatric care of patients with depression and co-morbid substance use disorders. *Journal of Clinical Psychiatry*. 61(9): 698–705.
- Office of National Statistics** (2002) Projections for Ethnicity in London Boroughs from the 2001 Census (unpublished report).
- Pereira, S., Sarsam, M., Bhui, K. and Paton, C.** (2005a) The London Survey of Psychiatric Intensive Care Units: service provision and operational characteristics of National Health Service units. *Journal of Psychiatric Intensive Care*. 1(1): 7–15.
- Rachlin, S.** (1973) On the need for a closed ward in an open hospital: The psychiatric intensive-care unit. *Hospital and Community Psychiatry*. 24(12): 829–835.
- Sharpley, M., Hutchinson, G., McKenzie, K. and Murray, R.M.** (2001) Understanding the excess of psychosis among the African-Caribbean population in England: review of current hypotheses. *British Journal of Psychiatry – Supplementum*. 40: s60–68.
- Smith, A.D.** (1997) Characteristics of inpatients transferred to a locked ward in a Scottish psychiatric hospital. *Health Bulletin*. 55(2): 77–82.
- Thornicroft, G., Davies, S. and Leese, M.** (1999) Health service research and forensic psychiatry: a Black and White case. *International Review of Psychiatry*. 11: 250–257.
- Wessely, S. and Castle, D.** (1998) Mental disorder and crime (comment). *Archives of General Psychiatry*. 55(1): 86–88.