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PATIENT ETHNICITY AND THREE PSYCHIATRIC INTENSIVE CARE UNITS COMPARED: THE TOMPKINS ACUTE WARD STUDY

ABSTRACT

Background: Psychiatric Care Units provide care to disturbed patients in a context of higher security and staffing levels. Although such units are numerous, few systematic comparisons have been made, and there are indications that ethnic minority groups may be over-represented.

Aim: To compare the rates of adverse incidents and patterns of usage of three Psychiatric Intensive Care Units.

Method: The study used a triangulation or multi-method design, bringing together data from official statistics, local audit and interviews conducted with staff.

Results: Intensive care patients were more likely to be young, male, and suffering a psychotic disorder, as compared to general acute ward patients. Caribbean patients were twice as likely, and Asian patients half as likely, to receive intensive care (age, gender and diagnosis controlled). There were large differences in service levels, staffing, team functioning and adverse incidents between the three units. Various aspects of physical security were important in preventing absconds.

Conclusions: More evaluative research is required in order to define effective service levels, and to explore the nature of the interaction between ethnicity and inpatient care provision during acute illness.

PATIENT ETHNICITY AND THREE PSYCHIATRIC INTENSIVE CARE UNITS COMPARED: THE TOMPKINS ACUTE WARD STUDY

BACKGROUND

Psychiatric Intensive Care Units have been in existence from at least the 1970s and probably earlier (Crowhurst & Bowers 2002), and consist of small wards with higher staffing levels and greater security, set up to cater for patients who are too disruptive or dangerous to be managed on ordinary acute wards (Dix 1995). Such facilities have been set up as pragmatic responses to difficulties in caring for difficult patients. To date there is little evidence on whether they are effective in keeping staff and patients safer, or in promoting recovery. Much of the previous research has described the opening or operation of single units (Jones 1985;Saverimuttu 1996), and although several large surveys have been carried out (Beer, Paton, & Pereira 1997;Ford & Whiffin 1991;Mitchell 1992), there have been no detailed comparisons of different units, save for one study of two PICUs in Slovenia, described only in brief (Dernovsek et al. 2003), and another in Australia highlighting differences in seclusion use (Hafner et al. 1989). Some previous UK research has raised concerns that ethnic minority patients are over-represented in the PICU (Brown & Bass 2004;Feinstein & Holloway 2002;Pereira et al. 2006), although in their analyses none of these studies controlled for the potential confounding factors of age, gender and diagnosis.

The data we report here were collected as part of the Tompkins Acute Ward Study, a multi-method longitudinal investigation of links between adverse incidents and staff factors. Previous papers from this study have described the nature and purpose of acute wards (Bowers et al. 2005), and the role of the Occupational Therapist (Simpson et al. 2005).

AIM

The aim of the study was to compare the rates of adverse incidents and patterns of usage of three Psychiatric Intensive Care Units.

METHODS

DESIGN

The study used a triangulation or multi-method design, bringing together data from official statistics, local audit and interviews conducted with staff.

SAMPLE AND PROCEDURE

This study received ethical approval from the local research ethics committee. The sample comprised of interviews and official data from three PICUs in one London NHS Trust.

Official statistics: These included data on the date, age, gender, and diagnosis of all admissions; details and dates of adverse incidents reported by nurses; and information on workforce availability and deployment. The data were drawn from several different departments of the NHS Trust concerned and collated by the research team. The period covered by this data was from 2002 (week 14) to 2004 (week 45), roughly two and a half years. Data on the local population were drawn from the 2001 census.

Clinical audit: The Trust Pharmacy Department conducted an audit of antipsychotic prescribing on inpatient wards using random samples of patients within wards, during 2002 and 2003. This data was provided to the research team.

Interviews: A total of 9 staff across the three PICUs were interviewed using the Operational Philosophy and Policy Interview (Bowers, Simpson, Alexander, Hackney, Nijman, Grange, & Warren 2005), comprising 3 ward managers, 3 F grade nurses, and 3 occupational therapists. All PICU consultant psychiatrists declined to be interviewed for this study. All interviews were tape recorded and transcribed.

DATA ANALYSIS

Admissions, workforce and adverse incident data were summarised using simple descriptive statistics for comparison between the three PICUs. Logistic regression was used to compare patients having any stay on the PICU, with those who were only admitted to an acute ward.

Interview transcripts were imported into qualitative data analysis software (QSR N6) All interviews were then read by three researchers, who met to collate ideas on analytic categories and priorities. For this study, data was extracted and collected from the interviews pertaining to ward management and function, developments and staff changes over the past year, team functioning, multidisciplinary relationships, and the management of difficult and challenging patients.

RESULTS

Patients arrived on the PICUs from prison, the courts, brought in by the police under mental health legislation, or transferred from acute admission psychiatric wards. The latter constituted 46% of all admissions to the PICUs, and the criteria for such transfers were that patients posed a risk of violence to self or others, or of absconding, were acutely ill, and difficult to manage in an ordinary acute ward environment. All three PICUs had similar admission criteria, as stated by those we interviewed.

Differences between patients who were admitted to acute psychiatric wards but did not have a PICU stay, and those that did or who were directly admitted there were explored using a table of unique patients (i.e. readmissions were ignored, but any stay on a PICU during the period classified the patient as a PICU patient). Logistic regression was used to contrast the two groups, and the results are presented in Table 1. A PICU stay was positively associated male gender, younger age, and a range of mainly psychotic diagnoses including bipolar affective disorder, recurrent depression, schizoaffective disorder, schizophrenia, unspecified non-organic psychosis and drug

induced psychosis. With respect to ethnicity, Caribbean patients were more than twice as likely, whilst Asian patient were half as likely to have a PICU stay, with no significant differences for Black African, Irish, White and 'other' ethnic groups. Figure 1 compares the ethnic makeup of the local population with that of PICU and acute ward patients, making these differences clearer. In case these ethnic differences were due to differential routes of admission by ethnicity (e.g. more Caribbean admissions via the criminal justice system), logistic regression was used to contrast direct admissions with transfers from acute wards. Other than the direct admissions being slightly older than the transfers, there were no differences in gender, diagnosis or ethnicity.

Table 2 presents comparative data on the three PICUs and the acute ward (and locality) populations they serve, together with staffing and patient throughput. This table is drawn upon in the case analysis below, together with material from the interviews.

REFUGE PICU

Population and patients: This was the largest of the three units, with the highest throughput of patients. In terms of its locality, this unit provided a higher proportion of PICU beds to acute beds, and higher proportion of PICU beds to the population served. However it had a significantly lower nurse staffing level compared to the other two units. Nevertheless it used few bank or agency staff and had the lowest sickness rate. Over the study time period it accommodated almost entirely male

patients. The largest proportion of admissions were of 'other' ethnicity patients, followed by white British and Caribbeans.

Developments: The ward team had been stable for the previous four years, with few changes. Some improvements had been made to the physical environment, including the addition of a pool table for patients. Prevention and Management of Violence and Aggression training had changed techniques taught from holds using pain to obtain compliance, to non-painful holds based on leverage.

Multidisciplinary relationships: There were solid, mutually trusting and respecting relationships between all three professions (occupational therapy, nursing and medical), which had existed for some years.

Containment: In both prescribing surveys Refuge PICU had the highest levels of antipsychotic prescribing (2002 mean CPZ equivalent per patient per day 200mg, 2003 122mg). The nurses commented in the interviews that the Consultant prescribed liberal dosages and that they sometimes thought less might be better. Refuge PICU had a seclusion room that was used for patients from other wards in the rest of the unit, as well as for PICU patients.

Conflict incidents: There was a low rate of all incidents by bed, with a similarly low rate of each of the different subtypes, and a similar incident prevalence profile to Shelter PICU. Interviewees reported one recent suicide of a patient who ran off whilst on escorted leave, and two serious suicide attempts by patients on the ward.

HAVEN PICU

Population and patients: In terms of size and throughput, this unit was similar to Shelter PICU: a smaller number of beds, a slower throughput of patients, and more acute beds per PICU bed. Although all three units served deprived areas, this area was the most deprived of the three, with the most psychiatric need and likely morbidity as measured by the MINI 2000. Haven PICU had the highest nursing establishment figures, however it also had the highest sickness rate and the highest vacancy rate, and was the highest user of bank and agency staff. Just above 30% of admissions were female – a far higher proportion than the other two units. The largest proportion of admissions were white British, followed by Asian and 'other' ethnicity.

Developments: Two years prior to interviews the previous ward manager left, and was succeeded by a series of short-term and temporary post holders. The current ward manager was appointed 7 months prior to the interviews, and found the ward medically dominated with high sickness rates among the nursing staff. Following a series of absconds due to physical security deficits, changes were made to the structure of the ward as pushed for by the ward manager. The ward closed for two days for training, the team developed a new ward philosophy, and the implementation of all safety and security related policies was tightened.

Multidisciplinary relationships: the relationship between the new ward manager and the medical team was poor, with disputes over major items like medical control over admissions and the appropriateness of leave for PICU patients, and more minor issues like the location of ward rounds.

Containment: Haven PICU does not have a seclusion room. Staff had been using a side room as an extra care area where disturbed patients were kept accompanied by nurses, however this practice was discontinued some time before the interviews took place.

Conflict incidents: The rate of adverse incidents was three to four times higher than on the other two PICUs, and that differential existed for every type of incident, from aggression through absconding to self-harm. Interviewees described a number of absconds which could be ascribed to poor physical security issues (defective doors, windows and fence) which were not quickly remedied. They also described two patients in the recent past that had repeatedly assaulted staff. One of these two could not be managed on the PICU, as he was assaulting staff several times a day, and was eventually reluctantly transferred by the Consultant to a more specialist unit.

SHELTER PICU

Population and patients: In terms of size and throughput, this unit was similar to Haven PICU: a smaller number of beds, a slower throughput of patients, and more acute beds per PICU bed. However this unit had a very much higher numbers of the local population per bed, a third more than Haven PICU, and twice as many as Refuge PICU. Nursing establishment figures were closer to the lower numbers on Refuge PICU, although still not as low, while the vacancy rate and use of bank and agency staff were similar. Again like Refuge PICU, this unit admitted mostly men. The

largest proportion of admissions were white British and ‘other’ ethnicity patients, followed by Caribbeans.

Developments: Overall stability of philosophy and approach set by the ward manager who opened the unit in a newly built hospital more than two years previously. Some changes of staff (ward manager and consultant), but the 'acting up' of an existing nursing team member is maintaining the culture.

Multidisciplinary relationships: Some relationship strain was described, with the occupational therapist and some nurses feeling undervalued by the medical team, and reports of arguments between the PICU consultant and other consultants about admissions and discharges.

Containment: In both prescribing surveys, Shelter PICU had the lowest level of antipsychotic prescribing (2002 CPZ equivalent per patient per day 73mg, 2003 35mg). A seclusion room was available, but this was hardly used.

Conflict incidents: There was a low rate of all incidents by bed, with a similarly low rate of each of the different subtypes, and a similar incident prevalence profile to Refuge PICU. Interviewees spoke about two absconds through a defective window and over an inadequate fence, and also mentioned a serious, frightening inter-patient fight.

DISCUSSION

The gender age and diagnostic profile of PICU patients confirms that of previous studies: PICU patients are younger than acute populations, more likely to suffer from psychotic disorders, and more likely to be male (Brown & Bass 2004). It is known that Caribbeans in the UK and The Netherlands are at higher risk of schizophrenia and are more likely to be perceived as violent (Mulder, Koopmans, & Selten 2006;Singh et al. 1998). Some previous studies have also drawn attention to the high numbers of ethnic minority patients within PICUs (Feinstein & Holloway 2002;Pereira, Sarsam, Bhui K., & Paton 2006), and expressed concern that this might be due to racially biased, exaggerated assessments of risk, e.g. 'big black and dangerous' (Prins 1993). Our findings suggest that the question is far more complex, in that although Caribbean patients were more prevalent in the PICUs, African patients were not, and Asian patients were significantly less likely to get admitted there. This suggests that there is a particular aspect of the Caribbean mentally ill population (rather than racist perceptions of dangerousness) that leads to their excessive numbers in the PICUs. Explanations for the twofold over-representation of Caribbean patients on the PICUs are not easy to find. Caribbeans are in reality no larger in body size than the white majority population (Erens, Primatesta, & Prior 1999) therefore appear no more threatening. Evidence on the abuse of drugs by Caribbeans is divided, with a large survey showing no difference (Home Office 2006), but two PICU based studies showing a link between cannabis use, delayed recovery and Caribbean ethnicity (Feinstein & Holloway 2002;Isaac, Isaac, & Holloway 2005). Unfortunately the ethnic breakdown of crime figures by the Home Office does not separate Africans from Caribbeans, but there is evidence for higher rates of crime in both these groups

(Home Office 2004). However crime statistics are themselves socially produced by a criminal justice system that may excessively scrutinise some minority populations, thus producing spurious differences in the figures. Some recent research suggests that higher rates of schizophrenia amongst UK Caribbeans may be due to more unstable family backgrounds (Murray, 2006), so it is possible this same factor may account for more challenging behaviour (through the association of deprivation and abuse with anti-social personality disorder, Robins 1966, West 1982) in this ethnic group. Much less previous research has focussed upon the Asian group of patients, and it is difficult to know why they were less likely to need PICU care.

Although the PICU patient sample clearly was different from the more general acute psychiatric population, large differences between the three PICUs as far as ward organisation and patient composition were found. In other words, the three PICUs described have been shown to have very different styles and characters, even though they co-exist within the same NHS Trust within the same policy framework, both locally and nationally.

The situation on Haven PICU described in this study raises the most interesting questions around the causes of the high rates of adverse incidents. A number of possible explanations exist for this:

1. Conflict behaviours from the patients may have reflected and been produced by the discord within the multidisciplinary team. One way this might have been produced would be via inconsistency between different members of the team. However there was also evidence for some discord among the team on Shelter PICU, and yet this did not seem to lead to more adverse incidents.

2. The period of poor ward leadership prior to the appointment of a permanent new ward manager may have weakened by skills and clinical nursing care over a sustained period, leading to a poor and ineffective ward culture, high sickness and vacancy rates and therefore a high rate of incidents. The interviews gave some evidence for this in that the new ward manager stressed the need for better leadership and more training in clinical nursing skills.

The low adverse incident rate in Refuge PICU does not appear to be explained by the high levels of antipsychotic prescribing there. Shelter PICU, with the lowest dosages per patient out of the three units, has a similar frequency of incidents. The low frequency of incidents on Shelter does not seem to be explained by this ward having less admission pressure and more easily manageable patients as a result of this. That is to say, Shelter PICU should be the most high pressured and acute of the three units. It has the fewest number of beds to the population served, suggesting that only the most acutely of acutely ill patients in the district gain access. Yet this unit has one of the slowest patient turnover rates and a low rate of incidents. One possible explanation might be the lower numbers of direct admissions proportional to transfers from the acute wards. Both Shelter and Refuge PICUs have proportionately fewer of these type of admissions, which are generally from the criminal justice system and may consist of more acutely unwell or disruptive patients. However our data could detect no differences in the demographic and clinical profile between the two groups of patients.

The similar accounts of absconds through windows and over fences, from both Haven and Shelter PICUs, indicate that physical security is an important component of PICU provision and an effective way to prevent absconds. Previous research in acute psychiatric wards has found peak absconding times during nursing shift handovers (Bowers et al. 1999), also indicating the importance of supervision and security. However the efficacy of locked doors in preventing absconding in acute psychiatry is in dispute, with door locking increasing (Bowers et al. 2002) but research showing that absconding can be decreased whilst keeping the door unlocked (Bowers, Alexander, & Gaskell 2003). The lesson from these three PICUs is that physical security to prevent absconds needs to encompass more than just the front door to the ward, and include windows and fences.

LIMITATIONS AND CONCLUSIONS

The strengths of this study are that more than one unit is described, and qualitative and quantitative data are brought together in a triangulation design. However this design is still too small scale to provide answers to some of the questions that are raised by differences between the units studied. Further research into PICUs on a larger scale is required to answer these and other questions.

The provision of PICU care is hugely variable, even within the contiguous districts served by a single NHS Trust. Guidance on levels of PICU provision is totally absent from UK government recommendations (Department of Health 2002). Given the variability that has been uncovered, more research needs to be undertaken to

determine what are the most effective care configurations for patient safety and therapeutic efficacy. That research will also need to further investigate the interface between the psychiatric and criminal justice system, as they impact on PICU bed use, with a view to defining appropriate and effective usage. The impact of multidisciplinary relationships and staffing changes on patients are also important topics for further research.

The accounts of staff about the relationship between physical security and absconds provides prima facie evidence that windows and fences of sufficient strength can be effective. Any strategy to prevent or minimise absconding with thus need to set appropriate levels of physical as well as relational security.

There are important variations in PICU usage by ethnicity that do not appear to be explicable in terms of racism. Instead such differences might arise out of culturally different patterns resilience or vulnerability to mental disorder, or ways of interacting with the psychiatric service, or means of expressing distress. Further research into the nature of these interactions may deliver findings of benefit to people of all ethnicities.

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Table 1. Logistic regression of variables predicting PICU rather than acute ward only admission

	Odds Ratio	Std. Err.	z	P>z	[95% Conf.	Interval]
Black Caribbean	2.33	0.43	4.57	0.000	1.62	3.34
Asian	0.55	0.10	-3.21	0.001	0.38	0.79
Bipolar affective disorder	5.01	2.03	3.97	0.000	2.26	11.11
Recurrent depressive disorder	5.29	3.71	2.38	0.017	1.34	20.91
Schizoaffective disorder	6.88	3.00	4.42	0.000	2.92	16.17
Schizophrenia	3.84	1.48	3.49	0.000	1.80	8.17
Unspecified nonorganic psychosis	3.08	1.27	2.73	0.006	1.37	6.89
Drug induced disorder	2.65	1.15	2.25	0.025	1.13	6.22
Male gender	7.01	1.06	12.90	0.000	5.22	9.43
Age	0.97	0.01	-5.37	0.000	0.96	0.98

No. of observations = 3849, Pseudo R squared = 0.1743

Figure 1. Ethnic composition of acute ward and PICU patients compared to local population (20-64 yrs).

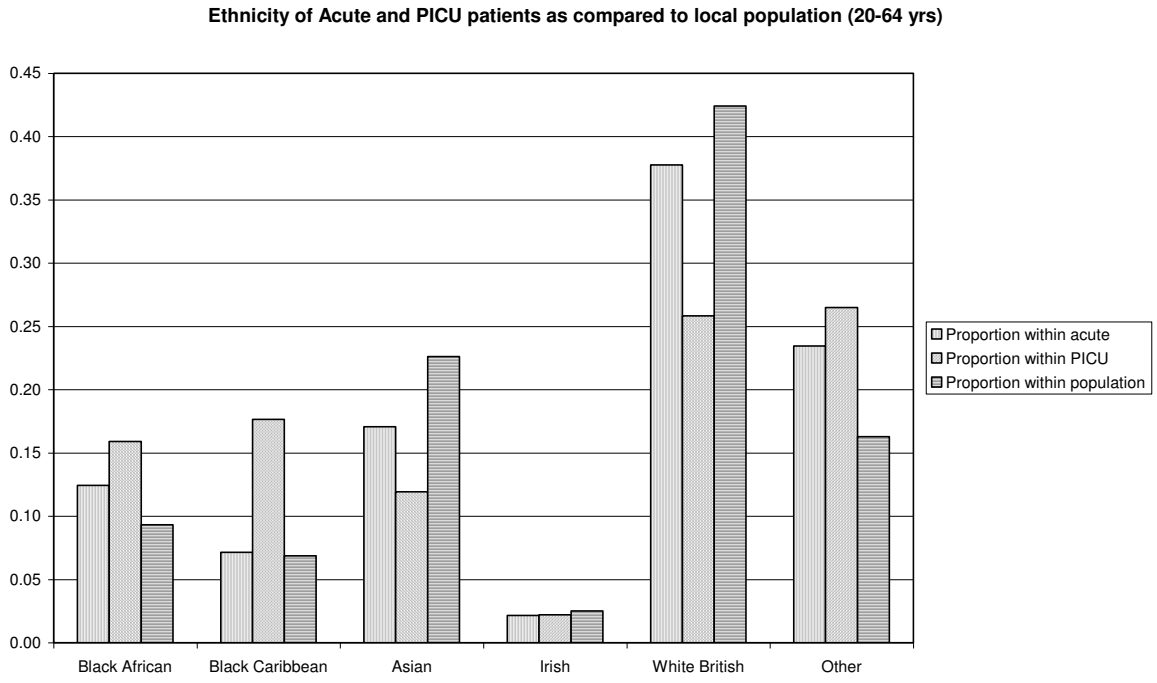

Table 2. Beds, admissions, patients, populations, deprivation and staffing compared across the three PICUs.

	Refuge	Haven	Shelter	All
No. beds	15	9	8	32
No. acute beds served	88	74	66	228
Population served (000s, 2001 census)	210	196	244	650
Admissions/week	2.25	0.38	0.78	3.41
Transfers in/week	1.53	0.88	0.53	2.94
Mean occupancy/week	0.95	0.81	0.95	0.90
New patients per bed per week	0.25	0.14	0.16	0.56
Acute beds per PICU bed	5.87	8.22	8.25	7.13
Population per PICU bed (000s)	14.00	21.78	30.50	20.31
Mini 2000	1.83	1.90	1.76	1.83
Mean age PICU	32.73	31.92	34.11	32.92
Proportion male PICU	0.96	0.69	0.91	0.85
Proportion African PICU	0.17	0.09	0.19	0.16
Proportion Caribbean PICU	0.22	0.10	0.13	0.18
Proportion Asian PICU	0.04	0.24	0.23	0.12
Proportion Irish PICU	0.03	0.02	0.00	0.02
Proportion White British PICU	0.24	0.33	0.23	0.26
Proportion other ethnicity PICU	0.29	0.22	0.23	0.26
Mean age Acute	37.14	37.33	35.33	36.60
Proportion male Acute	0.46	0.61	0.56	0.54
Proportion African Acute	0.13	0.06	0.15	0.12
Proportion Caribbean Acute	0.12	0.03	0.06	0.07
Proportion Asian Acute	0.05	0.25	0.22	0.17
Proportion Irish Acute	0.03	0.02	0.01	0.02
Proportion White British Acute	0.34	0.47	0.35	0.38
Proportion other ethnicity Acute	0.32	0.16	0.21	0.23
All incidents per bed per week	0.033	0.138	0.036	0.069
Absconds per bed per week	0.006	0.022	0.004	0.011
Physical aggression per bed per week	0.011	0.068	0.014	0.031
Verbal aggression per bed per week	0.006	0.027	0.009	0.014
Property damamge per bed per week	0.004	0.008	0.003	0.005
Self-harm per bed per week	0.002	0.006	0.001	0.003
Nursing establishment WTE per bed	2.01	3.68	2.71	2.80
Nursing WTE vacancy per bed	0.59	1.24	0.46	0.76
Nursing WTE sick leave per bed	0.01	0.18	0.08	0.09
Nursing WTE bank and agency use per bed	0.48	1.01	0.58	0.69

REFERENCES

Beer, M. D., Paton, C., & Pereira, S. 1997, "Hote beds of general psychiatry; anational survey of psychiatric intensive care units", Psychiatric Bulletin, vol. 21 142-144.

Bowers, L., Simpson, A., Alexander, J., Hackney, D., Nijman, H., Grange, A., & Warren, J. The Nature and Purpose of Acute Psychiatric Wards: The Tompkins Acute Ward Study. Journal of mental Health 14[6], 625-635. 2005.

Bowers, L., Alexander, J., Callaghan, P., Eales, S., Guy, S., McCann, E., & Ryan, C. 2002, "Safety and security policies on psychiatric acute admission wards: results from a London-wide survey", Journal of Psychaitric and Mental Health Nursing, vol. 9, pp. 427-433.

Bowers, L., Alexander, J., & Gaskell, C. 2003, "A trial of an anti-absconding intervention in acute psychiatric wards", Journal of Psychiatric & Mental Health Nursing, vol. 10, no. 4, pp. 410-416.

Bowers, L., Jarrett, M., Clark, N., Kiyimba, F., & McFarlane, L. 1999, "Absconding: how and when patients leave the ward... part 2", Journal of Psychiatric & Mental Health Nursing, vol. 6, no. 3, pp. 207-211.

Brown, S. & Bass, N. 2004, "The psychiatric intensive care unit: patient characteristics, treatment and outcome", Journal of mental Health, vol. 13, no. 6, pp. 601-609.

Crowhurst, N. & Bowers, L. 2006, "Philosophy, care and treatment on the psychiatric intensive care unit: themes, trends and future practice", Journal of Psychiatric and Mental Health Nursing, vol. 9, pp. 689-695.

Department of Health 2002, National Minimum Standards for General Adult Services in Psychiatric Intensive Care Units (PICU) and Low Secure Environments, Department of Health, London, 27766.

Dernovsek, M., Novak-Grubic, V., Tavcar, R., & Zmitek, A. 2003, "Psychiatric intensive care units: Comment", Australian and New Zealand Journal of Psychiatry, vol. 37, no. 1, p. 110.

Dix, R. 1995, "A nurse led psychiatric intensive care unit", Psychiatric Bulletin, vol. 19(5) 258-287.

Erens, B., Primatesta, P., & Prior, G. 1999, Health Survey for England - The Health of Minority Ethnic Groups '99, The Stationary Office, London.

Feinstein, A. & Holloway, F. 2002, "Evaluating the use of a psychiatric intensive care unit: Is ethnicity a risk factor for admission?", International Journal of Social Psychiatry, vol. 48, no. 1, pp. 38-46.

Ford, I. & Whiffin, M. 1991, "The role of the psychiatric ICU", Nursing Times, vol. 87(51) 47-49.

Hafner, R. J., Lammersma, R., Ferris, R., & Cameron, M. 1989, "The use of seclusion; a comparison of two psychiatric care units", Australian and New Zealand Journal of Psychiatry, vol. 23 235-239.

Home Office 2004, Statistics on Race and the Criminal Justice System - 2004. A Home Office publication under section 95 of the Criminal Justice Act 1991, Home Office Research, Development and Statistics Directorate, London.

Home Office 2006, Ethnicity and drug use: key findings from the 2001/2002 British Crime Survey. Findings 209, Home Office Research, Development and Statistics Directorate, London.

Isaac, M., Isaac, M., & Holloway, F. 2005, "Is cannabis an anti-psychotic? The experience in psychiatric intensive care", Human Psychopharmacology: Clinical and Experimental, vol. 20, no. 3, pp. 207-210.

Jones, J. R. 1985, "The psychiatric intensive care unit", British Journal of Psychiatry, vol. 146: 561-562.

Mitchell, G. D. 1992, "A survey of psychiatric intensive care units in Scotland", Health Bulletin, vol. 50 228-232.

Mulder, C., Koopmans, G., & Selten, J. 2006, "Emergency psychiatry, compuslory admissions and clinical presentation among immigrants to The Netherlands", British Journal of Psychiatry, vol. 188, pp. 386-391.

Murray, R. (2006) First onset of schizophrenia in 3 English cities. Paper presented at the NIMHE Delivering Race Equality conference, Birmingham, 22nd February 2006.

Pereira, S., Sarsam, S., Bhui K., & Paton, C. 2006, "The London Survey of Psychiatric Intensive Care Units: psychiatric intensive care; patient characteristics and pathways for admission and discharge", Journal of Psychiatric Intensive Care, vol. 1, no. 1, pp. 17-24.

Prins, H. C. 1993, Report of the Committee of Inquiry into the Death in Broadmoor hospital og Orville Blackwood and a Review of the Deaths of Two Other Afro caribbean Patients, "Big, Black and Dangerous".

Robins, L. N. 1966, Deviant children grown up: a sociological and psychiatric study of sociopathic personality Williams and Wilkins, Baltimore.

Saverimuttu, A. 1996, "Starting from Scratch", Nursing Standard, vol. 10(34) 26-27.

Simpson, A., Bowers, L., Alexander, J., Ridley, C., & Warren, J. Occupational Therapy and Multidisciplinary Working on Acute Psychiatric Wards: The Tompkins Acute Ward Study. British Journal of Occupational Therapy 68[12], 545-552. 2005.

Singh, S., Croudace, T., Beck, A., & Harrison, G. 1998, "Perceived ethnicity and the risk of compulsory admission", Social Psychiatry & Psychiatric Epidemiology, vol. 33, pp. 39-44.

West, D. J. 1982, Delinquency. its roots, careers and prospects Heinemann Educational Books, London.