

ORIGINAL PAPER

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Life events, ethnicity and perceptions of discrimination in patients with severe mental illness

Accepted: 3 September 1999

Abstract *Background:* Whilst it is commonly believed that black and ethnic minority (B&EM) people living in the UK experience social disadvantage compared with the white British (WB) population, no study has specifically addressed this issue in patients with severe mental illness. We sought to test the hypothesis that B&EM patients experience more negative life events than their WB counterparts, and to examine the extent to which they attribute these events to discrimination. *Method:* Thirty-four WB, 78 African Caribbean (AC) and 35 other ethnic minority patients with psychotic illnesses, defined using Research Diagnostic Criteria, were asked to complete a Racial Life Event Questionnaire examining life events and perceptions of discrimination at baseline and 12 and 24 months later. *Results:* African Caribbean patients experienced more 'Financial' life events across the study period, otherwise there were no significant differences between patient groups in number of life events experienced. The B&EM group collectively ($n = 113$), however, were significantly more likely than the WB group ($n = 34$) to attribute 'Assault', and 'Legal' life events to discrimination. The AC patient group were significantly more likely than the other two ethnic groups to attribute the 'Financial' and 'Health' life events they experienced to discrimination. The B&EM group was also significantly more likely, and particularly the AC patient group, to report that members of their own ethnic group are adversely affected by discrimination. Further analyses showed skin colour rather than ethnicity or nationality to be the major contributing factor to perception of discrimination;

thus, the Irish ($n = 11$) had similar scores to the WB while Africans ($n = 16$) scored like the ACs. *Conclusion:* Our study shows that B&EM patients do not experience significantly more life events than WB patients; however, their perception of these events is clearly different, and significantly more often attributed to racism. It is reasonable to suppose that patients may be disinclined to utilise services they believe to be prejudiced against them on the basis of their skin colour, and service providers need to be aware of this in order to create health care services that B&EM patients feel confident to use.

Introduction

About 6% of the population of Great Britain are members of black groups according to the 1991 census definitions of the Office of Population Censuses and Surveys (OPCS). Of the 3 million who identified themselves as black, 27% said they were Indian; 16% Pakistani; 6% Bangladeshi; 22% Black Caribbean or Black Other (who appear to be predominantly British born Caribbeans); 7% were Black African; 6% were Chinese; and 16% were Other-Asians or Other-Other.

Research has consistently shown elevated rates of psychotic illness among the African Caribbean (AC) population in Britain compared with the indigenous white British (WB) group (Bagley 1971; Leff et al. 1976; McGovern and Cope 1987; Harrison et al. 1989; Wessley et al. 1991; van Os et al. 1996; Bhugra et al. 1997). Rates for psychotic illness are not similarly raised in the Caribbean (Hickling 1991; Hickling and Rodgers-Johnson 1995; Bhugra et al. 1996). This fact, and the evidence that the risk is greatest in the second generation, i.e. those ACs born in the UK (Hutchinson et al. 1996), suggests the operation of adverse environmental factors. One of these hypothesised factors has been the experience of racism and social disadvantage – a not unreasonable hypothesis given that ACs receive an inferior service to that of the indigenous WB population in

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aspects of housing (Ginsberg 1992), employment (Jones 1993), social and health care (Francis et al. 1989; Skellington and Morris 1992). Further, studies have pointed to the unequal treatment of black people by the police and courts (Hood 1992; Skellington and Morris 1992), and in 1989 the Prison Reform Trust reported that if all groups were imprisoned at the same rate as black people, the prison population would then have been 300,000 instead of 50,000.

Grier and Cobbs (1968) argued that black people in white society have developed certain protective survival mechanisms to shield them against the consequences of living in an oppressive environment. They see cultural paranoia as adaptive, rather than abnormal, and suggest that the combination of cultural paranoia and negative social experiences may increase the vulnerability of black people to mental health problems in predominantly white societies. Once in the mental health care system, black patients in Britain have been found to have poorer compliance and higher rates of compulsory admissions than their white counterparts (McGovern and Cope 1991; Takei et al. 1998). Lewis and colleagues (1990) showed that psychiatrists perceive a greater risk of violence from black than white patients, and would more often suggest that police involvement is appropriate when a patient is black. Furthermore, Harrison et al. (1989) showed that although ACs were no more likely to have been aggressive at the time of admission, once admitted staff were more likely to perceive them as dangerous. Harrison et al. (1988) and Harvey et al. (1990) showed that whilst there is little difference in the clinical profiles of AC and white psychotic patients, it appears they are treated differentially in the health care system. Black patients are more likely to be admitted to hospital on sections of the mental health act (Littlewood 1986; McGovern and Cope 1987; Harrison et al. 1989; Owens et al. 1991; McKenzie et al. 1995; Davies et al. 1996), and police-referred psychiatric admissions are more common in black than white patients (McGovern and Cope 1987; Dunn and Fahy 1990; Pipe et al. 1991; Turner et al. 1992). Further, black patients are more likely to be prescribed psychotropic medication and to be kept in hospital longer (Dunn and Fahy 1990), often in seclusion or on locked wards (McGovern and Cope 1987).

We, therefore, set out to assess the frequency of life events, and perception of discrimination, in patients with severe mental illness from different ethnic and national backgrounds. We predicted that:

1. AC patients would report more negative life events.
2. AC patients would report more perceptions of discrimination than patients from other ethnic groups.
3. AC patients would more frequently report that the lives of members of their ethnic group are adversely affected by discrimination.

We also measured global ratings of 'Comfort' (i.e. self-perceptions of how relaxed and at ease patients feel living in England), and similarly ratings of 'Value' (i.e.

how valuable as a person they feel living in England). We predicted that:

4. Measures of both 'Comfort' and 'Value' would be lower in the AC group.

This study does not attempt to relate life events to age of onset of psychosis, prodromal behaviours or relapse episodes, as such data were not available.

Subjects and methods

A total of 147 patients with a history of chronic psychotic illness was recruited to take part in a study examining the efficacy of community care. Patients were recruited (1) at the point of discharge from hospital, or (2) whilst receiving outpatient care. The following inclusion criteria applied:

1. Presence of psychosis according to Research Diagnostic Criteria (RDC: Spitzer et al. 1978)
2. Hospitalised for psychotic symptoms at least twice, with the most recent admission within the previous 2 years
3. Absence of organic brain damage or a primary diagnosis of substance abuse
4. Not already involved in some form of case management.

A revised version of the Racial Life Events Schedule (RALES; Bhugra and Mallet, unpublished document, 1991) was administered to all consenting patients at baseline and 12 months later (Year 1) of the study. The Racial Life Event Questionnaire (RLEQ) has 13 categories measuring 'Employment' (10 questions), 'Education' (5), 'Finance' (4), 'Health' (6), 'Bereavement' (4), 'Moves' (3), 'Marriage' (8), 'Children' (13), 'Sexual relationships' (4), 'Housing' (6), 'Assault' (5) and 'Legal' (4). There is thus a total of 72 questions. Patients were asked: 'Over the past three months have you experienced any of the following?...' and the list of items from each category was read to them. If patients responded 'Yes' to any item they were asked at the end of the category whether that event was related in any way to their ethnicity, skin colour or nationality. Answers were recorded verbatim. At 24 months (Year 2) the RLEQ was further revised so that it incorporated the categories 'Finance' (4 questions), 'Health' (5), 'Housing' (5), 'Assault' (5), and 'Legal' (5) and omitted the other categories. The exclusion of the other categories was based on the finding from initial analyses of the data that these categories appeared not to be areas that the patients were actively involved in, i.e. it was not possible to report on 'Employment' life events as most patients were longterm unemployed. The revised version containing 24 questions was administered to all patients in Year 2 of the study. In addition to asking patients whether they believed the actual event experienced was related to their ethnicity, skin colour or nationality, patients were asked whether they felt that 'generally speaking' people from their own ethnic or national group were subject to discrimination in each category of life events. At baseline, Year 1 and Year 2 the questionnaire incorporated a Likert scale measuring the degree of 'Comfort' and 'Value' patients felt. Patients were asked: 'On a scale of 1-10, can you tell me how comfortable, that is, how at home, how relaxed you feel as a white/black/Irish [as appropriate] person in this culture?' They were asked to rate themselves on the 'Value' scale in a similar way, i.e. 'On a scale of 1-10 can you tell me how valuable a person you feel yourself to be as a white/black/Irish [as appropriate] person in this culture?'

Demographic history

Data were collected from both direct interview with the patient and from hospital case notes on age, sex, ethnicity, country of birth, country of birth of parents, age at first contact with psychiatric services, educational and occupational history and marital status. Occupational history was coded according to the Market Research

Society's occupational groupings (1991). We defined eight ethnic groupings in the study: white British ($n = 34$), first generation African Caribbean ($n = 38$), second generation African Caribbean ($n = 40$), African ($n = 16$), Indian ($n = 3$), European ($n = 3$), Irish ($n = 11$), and Middle Eastern ($n = 2$). These definitions were based on patients' country of birth and country of birth of parents. In order to give statistical power to the analyses in terms of group size, we categorised these groups into three larger groups: white British ($n = 34$), African Caribbean ($n = 78$) and Other ($n = 35$).

Clinical assessment

The Operational Criteria Checklist for Psychotic Illness (OCCPI: McGuffin et al. 1991) was completed for all patients at baseline assessment. This instrument employs a range of operational definitions of psychiatric conditions including ICD, RDC and DSM-III-R and provides a diagnostic classification for each patient.

A measure of overall severity of illness was taken from the WHO Life Chart (1992), which assesses course of illness longitudinally over the previous 2 years. Course type was rated as:

1. Episodic (no episode longer than 6 months)
2. Continuous (no remission longer than 6 months)
3. Neither episodic nor continuous, and
4. Not psychotic in this period.

These data were coded with reference to hospital case notes.

Data were collected by three researchers: a psychiatrist, a psychologist and a sociologist.

Statistical analysis

Demographic characteristics were compared between ethnic groups using chi-squared tests for categorical variables and analysis of variance for continuous variables. The proportion of

questions in each category of life events to which subjects responded 'Yes' over the entire study period was modeled using logistic regression with random effects for subjects. This method differs from ordinary logistic regression by allowing subjects' risk of experiencing the event to differ, by a random amount, from the risk predicted by the independent variables used in the logistic regression. Individual differences between subjects are assumed to persist across the study period (i.e. a subject at a higher risk than other subjects sharing the same independent variables remains at a higher risk throughout). The model therefore takes account of the longitudinal nature of the data, allowing responses by the same subject to be correlated across interviews. Variables included in the regression analysis were ethnicity, education, social class, diagnostic group, gender and interview (i.e. Baseline, Year 1 and Year 2). Perceptions of discrimination were modeled in a similar way; however, as there were insufficient data to model the time dependence of such perceptions, the number of interviews at which a life event was perceived as relating to discrimination was divided by the number of interviews at which a life event was experienced. A logistic regression model with overdispersion was fitted to allow for unexplained individual differences in subjects' tendencies to perceive discrimination. Chi-squared tests were used to analyse patients' perceptions of discrimination experienced by members of their own ethnic group. Measures of 'Comfort' and 'Value' were analysed using linear regression using the mean score across the three interviews.

Results

The demographic characteristics of the patient groups are presented in Table 1. There were significant differences between groups in educational qualifications ($P < 0.019$) and social status of fathers ($P < 0.001$),

Table 1 Patient demographic data

	White British ($n = 34$)	African Caribbean ($n = 78$)	Others ($n = 35$)	<i>P</i> -value
Diagnosis (%)				
Schizophrenia	18 (54.5)	38 (49.4)	15 (44.1)	$P = 0.70$
Affective psychosis	15 (45.5)	39 (50.6)	19 (55.9)	
Sex (%)				
Male	20 (58.8)	37 (48.1)	20 (57.1)	$P = 0.48$
Female	14 (41.2)	40 (51.9)	15 (42.9)	
Course type (%)				
Episodic	20 (58.8)	53 (67.9)	19 (54.3)	$P = 0.63$
Continuous	13 (38.2)	23 (29.5)	14 (40.0)	
Neither episodic nor continuous	1 (2.9)	2 (2.6)	2 (5.7)	
Never psychotic in this period	0	0	0	
Compulsory admissions over past two years (%)				
No	27 (79.4)	58 (74.4)	22 (62.9)	$P = 0.27$
Yes	7 (20.6)	20 (25.6)	13 (37.1)	
Mean age at interview (SD)	36.23 (12.53)	36.85 (11.58)	36.68 (9.58)	$P = 0.97$
Mean age at first admission (SD)	25.70 (7.86)	24.52 (6.02)	27.68 (9.09)	$P = 0.11$
Mean months as inpatient (SD)	19.05 (25.36)	21.97 (30.54)	14.97 (15.35)	$P = 0.43$
Social status of father (%)				
Classes A,B,C1	14 (43.8)	5 (7.5)	8 (25.8)	$P < 0.001$
Classes C2,D,E	18 (56.3)	62 (92.5)	23 (74.2)	
Employment over past 2 years (%)				
Unemployed	26 (76.5)	58 (74.4)	31 (88.6)	$P = 0.23$
Employed	8 (23.5)	20 (25.6)	4 (11.4)	
Educ. qualifications (%)				
None, CSEs	13 (38.2)	50 (64.1)	16 (45.7)	$P = 0.02$
GCSEs and O levels	9 (26.5)	19 (24.4)	8 (22.9)	
A levels and Degree	12 (35.3)	9 (11.5)	11 (31.4)	
Mean years of education (SD)	11.79 (2.59)	11.26 (1.92)	11.80 (3.40)	$P = 0.44$

with AC patients having fewer educational qualifications and coming from lower socioeconomic groups. There were no significant differences between groups on the other demographic variables examined, including diagnosis. Further, there was no significant difference in course type, although there was a trend for AC patients to be more likely to have an 'Episodic' and less likely to have a 'Continuous' course of illness than the other two groups. Notwithstanding the 'Episodic' course type, ACs had the highest recorded lifetime number of months as inpatient, although this did not reach statistical significance.

Life events experienced

The total mean number of life events across the study period was 8.37 (SD: 5.38, range 1–21) for the WB, 7.94 (SD: 5.85, range 0–26) for the AC, and 6.91 (SD: 5.34, range 0–24) for the 'Other' patients. Table 2 details the logistic regression analysis of life events over the entire study period, and shows that AC patients experienced more 'Financial' life events than the other two groups ($P = 0.008$). There was a trend for WB patients to report more 'Health' events than AC ($P = 0.06$) and 'Other' patients ($P = 0.05$). There were no significant differences between ethnic groups for 'Housing', 'Legal' or 'Assault' life events. Females reported more 'Health' life events than males ($P = 0.009$) and men had more 'Legal' life events than women ($P = 0.006$). Affective psychotic subjects had more 'Legal' life events than subjects with schizophrenia ($P = 0.003$). There were no significant differences in number of life events experienced by first and second generation AC patients. For the categories of life events eliminated from the RLEQ

for the Year 2 assessment, i.e. 'Employment', 'Education', 'Bereavement', 'Moves', 'Marriage', 'Children' and 'Sexual relationships', there were no significant differences between ethnic groups for baseline and Year 1.

Perceptions of discrimination

Subjects were asked whether they felt the life events they experienced were directly related to discrimination (Table 3). Logistic regression analysis of perceptions of discrimination over the study period showed that AC subjects were significantly more likely to report 'Financial' events as being related to discrimination ($P = 0.04$); however, there was a trend for the 'Other' group to report 'Financial' life events as being related to discrimination also ($P = 0.07$). AC subjects were significantly more likely to report 'Health' life events as being related to discrimination than both WB and 'Other' groups ($P = 0.007$). There were no significant differences between ethnic groups in perceptions of discrimination as related to 'Housing' life events; however, there was a trend for AC patients to attribute these events to discrimination ($P = 0.07$). For 'Assault' life events, both AC and 'Other' subjects were significantly more likely than 'WB' subjects to attribute life events to discrimination ($P = 0.001$ and $P < 0.000$ respectively). It was not possible to carry out regression modeling with 'Legal' life events as the WB group did not report a single event as related to discrimination. At baseline 46%, of the B&ME patients felt their 'Legal' life events were related to discrimination, with the value for Year 1 being 33% and Year 2 44%. Chi-squared tests, however, showed that second generation AC patients were

Table 2 Life events experienced over study period (WB White British, AC African Caribbean, O other)

Life event (No. of categories)	Variables used in regression	Mean no. of categories experienced	Odds ratios	95% CI interval of odds ratios	P-value
Assault (5)	WB	0.74	1	–	–
	AC	0.59	0.8	0.5, 1.3	$P = 0.35$
	O	0.58	0.8	0.4, 1.4	$P = 0.35$
Financial (4)	WB	0.35	1	–	–
	AC	0.53	1.7	0.9, 2.9	$P = 0.08$
	O	0.27	0.8	0.4, 1.5	$P = 0.43$
Health (6)	WB	0.81	1	–	–
	AC	0.63	0.7	0.5, 1.0	$P = 0.06$
	O	0.56	0.7	0.5, 0.9	$P = 0.05$
	Male	0.53	1	–	–
Housing (6)	Female	0.76	1.5	1.1, 2.0	$P = 0.009$
	WB	0.65	1	–	–
	AC	0.74	1.2	0.7, 2.1	$P = 0.41$
	O	0.65	1.0	0.6, 1.9	$P = 0.90$
Legal (4)	WB	0.14	1	–	–
	AC	0.14	1.2	0.4, 3.4	$P = 0.69$
	O	0.20	1.3	0.5, 4.3	$P = 0.54$
	Male	0.22	1	–	–
	Female	0.09	0.3	0.1, 0.7	$P = 0.006$
	Schizophrenic	0.08	1	–	–
Affective	0.22	3.5	1.5, 7.8	$P = 0.003$	

Table 3 Life events and perceived discrimination over study period

Life event	Subject	Events experienced	% of events attributed to discrimination	Odds ratios	95% CI of odds ratios	P-value
Assault	WB	34	6	1		
	AC	71	43	8.93	2.5, 31.4	$P = 0.001$
	O	29	63	12.7	3.2, 50.2	$P < 0.001$
Financial	WB	22	7	1		
	AC	67	35	14.2	1.2, 172.2	$P = 0.04$
	O	18	33	11.5	0.8, 162.9	$P = 0.07$
Health	WB	40	15	1		
	AC	74	38	4.77	1.5, 14.9	$P = 0.007$
	O	36	20	1.69	0.4, 6.6	$P = 0.45$
Housing	WB	29	24	1		
	AC	85	40	2.54	0.9, 6.9	$P = 0.07$
	O	36	33	2.00	0.6, 6.2	$P = 0.23$
Legal	WB	7	0	1		
	AC	22	53	–	–	–
	O	8	28	–	–	–

more likely to attribute 'Legal' life events to discrimination than were first generation AC patients ($P = 0.04$).

Finally, patients were asked whether they felt the lives of members of their own ethnic/national group were adversely affected by discrimination (see Table 4). Chi-squared tests showed significant differences between groups on all categories measured, i.e. 'Assault' ($P < 0.001$), 'Financial' ($P < 0.001$), 'Health' ($P < 0.001$), 'Housing' ($P < 0.001$) and 'Legal' ($P < 0.001$). African Caribbean patients were consistently more likely to report perceptions of discrimination than the other two groups across all measures. There were no significant differences between first and second generation AC patients.

Perceptions of discrimination, diagnosis and illness profile

We carried out chi-squared tests for all sub-categories of life events for baseline, Year 1 and Year 2, looking at perceptions of discrimination in both schizophrenic and affective psychotic diagnostic groups. There was no category where one diagnostic group was significantly more likely to attribute life events experienced to discrimination than the other. The same applied to 'general' perceptions of racism, with the exception of 'Financial' events, where affective psychotic patients were significantly more likely to report that members of their group are adversely affected by discrimination ($P < 0.03$).

Table 4 Year 2: Discrimination experienced by members of ones own ethnic group (percentages in parentheses)

	White British ($n = 25$)	African Caribbean ($n = 63$)	Others ($n = 30$)	P-value
Assault				
No	24 (96.0)	17 (28.3)	14 (50.0)	$P < 0.001$
Yes	1 (4.0)	40 (66.7)	12 (42.9)	
Don't know	0	3 (5.0)	2 (7.1)	
Financial				
No	23 (92.0)	22 (36.7)	11 (39.3)	$P < 0.001$
Yes	2 (8.0)	35 (58.3)	12 (42.9)	
Don't know	0	3 (5.0)	5 (17.9)	
Health				
No	24 (96.0)	25 (41.7)	16 (57.1)	$P < 0.001$
Yes	1 (4.0)	32 (53.3)	9 (32.1)	
Don't know	0	3 (5.0)	3 (10.7)	
Housing				
No	23 (92.0)	20 (32.8)	10 (35.7)	$P < 0.001$
Yes	2 (8.0)	40 (65.6)	14 (50.0)	
Don't know	0	1 (1.6)	4 (14.3)	
Legal				
No	24 (96.0)	9 (15.0)	10 (35.7)	$P < 0.001$
Yes	1 (4.0)	47 (78.3)	14 (50.0)	
Don't know	0	4 (6.7)	4 (14.3)	

We carried out a similar analysis looking at perceptions of discrimination and course of illness. Because so few patients fell into the category 'Neither episodic nor continuous', and no patient fell into the category 'Never psychotic in this period', we confined our analyses to the categories 'Episodic' and 'Continuous'. Again, there was not a single sub-category across the study period where one course type was more likely than the other to attribute life events to discrimination.

Analyses of the 'Other' group

The 'Other' group consisted of African ($n = 15$), Indian ($n = 3$), European ($n = 3$), Irish ($n = 11$) and Middle Eastern ($n = 2$) patients. We selected the African and Irish groups for two reasons (1) they had the largest number of subjects and (2) whilst both are defined as ethnic minority groups in the UK, one is black and one white. We looked at general perceptions of discrimination and, indeed, we did show that the Irish were scoring like the WB group, and the Africans like the ACs. There were no significant differences between the African and AC patient groups in any category of general perceptions of discrimination. Analysis of the Irish and WB patient groups showed significant differences in general perceptions of discrimination in the 'Legal' category only, with 20% of the Irish sample believing that the Irish are more likely to be discriminated against on the basis of their nationality compared with 4% of the WB ($P < 0.01$).

Measures of value and comfort

Linear regression analysis showed that AC and 'Other' patients had significantly lower mean 'Comfort' scores over the 2-year period ($P = 0.006$ and $P = 0.007$ respectively). The mean 'Comfort' scores were 5.7 (SD: 1.8) for 'Other', 5.7 (SD: 2.0) for AC and 7.0 (SD: 1.8) for WB patients. AC patients did not differ significantly from WB patients on 'Value' scores, but the 'Other' group had significantly lower 'Value' scores than WB patients ($P = 0.03$). The mean 'Value' scores were 4.5 (SD: 1.9) for 'Other', 5.1 (SD: 2.0) for AC and 5.5 (SD: 2.0) for WB patients. There were no significant differences between first and second generation AC patients on measures of 'Comfort' or 'Value' at baseline, Year 1 or Year 2.

Discussion

Hutchinson and colleagues (1998) found that black patients did not have a significantly increased number of life events preceding psychosis than their white counterparts, and our findings for this sample of chronic patients lend support to this work. We did not, however, have data on life events preceding onset of psychosis,

and confined our data collection to the 3 months before interview in order to maximise accurate recall. Our study examined the occurrence of life events and perceptions of racism in a series of chronic patients, and the study design did not lend itself to the examination of the aetiological role of life events in relapse rates. Notwithstanding, we did not find a significant difference in the reporting or perceptions of life events according to course of illness, in as much as episodic and continuous illness profiles did not significantly differ. We did not find a significant difference between ethnic groups in the number of life events experienced across the study period, the one exception being 'Financial' life events, with AC subjects reporting more events than the other two groups. However, it is conceivable, and in fact probable, that the events experienced by B&EM groups are perceived as more threatening, owing to the recognition and experience of both covert and overt forms of racial discrimination. Bebbington et al. (1996) suggested that there is an increased but inconclusive tendency to develop psychotic episodes in the presence of life events among black patients in the UK compared to WB patients, and it may be the context in which these life events are experienced, rather than the life events themselves, that determines the response. It has been suggested that life events do not exert a significant influence on the onset of psychotic disorders; however, whether this finding applies equally to patients from different ethnic backgrounds remains unclear. Life events do have a significant effect on course and frequency of relapse in chronically ill patients (Brown et al. 1973), and this may be particularly relevant where the experience of life events is associated with perceptions of threat and discrimination.

In our sample, AC patients are distinguishable from the WB and the 'Other' groups on a number of demographic variables; for example, whilst AC patients spent a similar amount of time in fulltime education, they were less likely to have educational qualifications at the end of this time. There is a clear gradient in social status (based on father's occupation) with the AC group significantly more likely to come from social classes C2, D and E than the other two groups, and with the 'Other' group positioned between the AC and the WB group. However, whether social status classification is appropriate according to father's occupation across ethnic groups is debatable. It may be that given family and social structures within the AC population, classification according to mother's occupational status is more appropriate, and would provide a less skewed distribution. The WB group were less likely to have had compulsory admissions than the other two groups, the 'Other' group having had the greatest number. The AC patients had the longest number of months of inpatient treatment, although interestingly they were less likely to have had a 'Continuous' course of illness. It is difficult to account for this finding; however, it may be that social stressors and perceptions of discrimination play a part in the frequent escalation to acute phase of illness and rehospitalisations.

African Caribbean patients were more likely to attribute 'Financial' and 'Health' life events to discrimination than the other two ethnic groups. Further, AC and 'Other' patients were more likely to attribute 'Assault' and 'Legal' events to discrimination than WB patients. Whilst it is conceivable that B&EM groups may experience considerable disadvantage in the area of employment, our study did not report such an effect, doubtless because so few of the patients were actually employed across the study period, and in fact most were longterm unemployed. There were also significant differences between groups in perceptions of discrimination as applied to their own ethnic group. Black and minority ethnic patients were significantly more likely to report that members of their own groups were adversely affected by discrimination in all of the categories examined. In particular, AC patients were most likely to report these perceptions. First and second generation AC patients differed only in perceptions of discrimination as applied to 'Legal' life events, with second generation patients significantly more likely to make these attributions.

Whilst it is unsurprising that B&EM patients reported perceptions of discrimination more often than WB patients (regardless of country of origin), what is perhaps more significant is the extent to which these beliefs are held. Seventy-eight percent of the AC patients and 50% of the 'Other' patients believe that members of their ethnic group are adversely affected by discrimination in the 'Legal' category, and this finding is reflected to varying degrees across the other categories. Members of the white ethnic minority groups, i.e. the Irish, whilst reporting more perceptions of discrimination than the WB group, reported significantly fewer perceptions of discrimination than the black patient group. In fact, we showed that the Irish showed more perceptions of discrimination than the WB in the 'Legal' category only, and that there were no significant differences in perceptions of discrimination between the AC and African patients in any category examined.

The belief held by B&EM patients that discrimination contributes to difficulties in the lives of members of their ethnic group is significant, and suggests that the buffer of social support from healthy members of the community against negative life events may be absent. Several authors have shown that social supports provide a degree of protection through a crisis brought about by negative life events, and that such support protects the person against the development of a mental disorder (e.g. Dalgard 1995; Ystgaard et al. 1999; Mazza and Reynolds 1998; Flint et al. 1998; Boyce et al. 1998; Vilhjalmsen et al. 1998; Brugha et al. 1997). For many B&EM patients this support may be less in evidence, because family members may be seen as experiencing the same problems. The impact of this diminished support is difficult to assess; however, that it contributes to the stressor of the life event is highly likely. This is reflected in the findings on 'Comfort', where AC and 'Other' patients have significantly lower mean scores than WB

patients, and whilst AC and WB patients did not differ significantly on 'Value' scores, the 'Other' patients had significantly lower mean 'Value' scores than WB patients. Landrine and Klonoff (1996) examined the effects of racial discrimination on the physical and mental wellbeing of a group of 153 non-psychiatric African Americans. They found that 98% had experienced at least one episode of racial discrimination in the past year and 100% had experienced at least one episode in their lifetime; they also found that the frequency of racial discrimination was strongly related to psychiatric symptoms and cigarette smoking and that 99% of the subjects reported finding episodes of racial discrimination stressful.

Notwithstanding our findings that perceptions of discrimination were unrelated to diagnosis or course of illness, the experience of racism may make B&EM people highly suspicious of mental health services, so that many may deny their mental health problems and avoid services until they end up presenting in crisis. We showed that AC patients were significantly more likely than the other two ethnic groups to attribute 'Health' life events to discrimination. Once in the system, whilst on the one hand B&EM patients may view white people and the system with suspicion, on the other they need to suspend these views in order to engage successfully in a therapeutic relationship. The difficulties are obvious. One study (Inman and Baron 1996), examining specific expectancies about the characteristics of perpetrators and victims of racial prejudice, showed that both AC and white subjects were more likely to label actions by whites against black as prejudiced than when the same actions involved black on white, white on white, or black on black prejudice. This suggests that stereotypes influence perceptions of prejudice and people expected to have prejudiced motives will be perceived to have prejudiced motives where none may exist. These stereotypes may be particularly relevant within the health care system, where patients may perceive themselves as essentially powerless, particularly when sections of the Mental Health Act are used. Harrison et al. (1988) demonstrated that stereotypes do in fact influence the perception and treatment of patients, and showed that while AC patients were no more likely to be aggressive at the time of admission, once admitted, staff were more likely to perceive them as dangerous. McGovern and Cope (1991) reported an underutilisation of the mental health services by AC patients, and it is reasonable to suppose that patients may be disinclined to utilise services they believe to be prejudiced against them on the basis of their skin colour.

A significant caveat in the present study is the absence of a control group. We do not know whether B&EM people generally experience more life events than WB people, what their perceptions of these life events are, and the role these events and perceptions play in their lives. Further, it would be informative to examine life events, and perceptions of life events, prior to onset of psychosis across ethnic groups. Our findings lend some

support to a social aetiology for an increased risk of psychosis in AC patients, and point to relative differences in perception of life experiences that are based on historical and shared community perceptions. Whilst B&EM patients do not appear to experience many more life events than WB patients, the life events experienced are additionally perceived to be associated with discrimination. This must certainly be considered in any attempt to address the problems that B&EM patients have with the psychiatric services.

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