

## Prevalence of anxiety and depressive illness and help seeking behaviour in African Caribbeans and white Europeans: two phase general population survey

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BMJ 1999;318:302-6

### Abstract

**Objective** To determine the prevalence of common mental disorders (anxiety and depression) and help seeking behaviour in African Caribbeans and white Europeans.

**Design** Two phase survey in a general population sample. The first phase comprised screening with the 12 item general health questionnaire; the second phase was standardised psychiatric assessment and interview about help seeking.

**Setting** People registered with four general practices in central Manchester.

**Participants** Of 1467 people randomly selected from family health services authority lists, 864 were still resident. 337 African Caribbeans and 275 white Europeans completed the screening phase (response rate 71%); 127 African Caribbeans and 103 white Europeans were interviewed in the second phase.

**Main outcome measures** One month period prevalence of anxiety and depressive disorders in each ethnic group.

**Results** 13% of African Caribbeans (95% confidence interval 10% to 16%) and 14% (10% to 18%) of white Europeans had one or more disorder. Anxiety disorders were significantly less common among African Caribbeans (3% (1% to 5%) *v* 9% (6% to 12%) in white Europeans). Depressive disorders were significantly more common among African Caribbean women than white women (difference 8% (1% to 15%)). Medical help seeking was similar in the two groups, but African Caribbeans with mental disorders were more likely to seek additional help from non-medical sources (12/29 *v* 5/29, *P* = 0.082).

**Conclusions** In an inner city setting the prevalence of common mental disorders is similar in these two ethnic groups.

### Introduction

Health policy makers are paying increasing attention to assessing the needs of minority ethnic groups with the aim of basing policy on reliable data.<sup>1</sup> Most epidemiological research concerning mental disorders in different ethnic groups in Britain has concentrated on psychotic disorders and has shown higher treated prevalence and incidence among African Carib-

beans.<sup>2,3</sup> By contrast, there have been few surveys of common mental disorders (depression and anxiety) in this ethnic group. One recent study found a lower prevalence of anxiety symptoms in Caribbeans (13%) compared with whites (18%) but higher estimated weekly prevalence of depressive neurosis (6.0% in Caribbeans and 3.8% in whites).<sup>4</sup> The increased unemployment and poverty among British African Caribbeans<sup>5</sup> together with the effects of racism suggest that anxiety and depression might be more common among this ethnic group than in white Europeans.

### Participants and methods

#### Design and instruments

We used a two phase design in order to screen a large sample but limit the number of lengthy psychiatric interviews.<sup>6</sup> The whole sample received the first phase screening instrument (12 item general health questionnaire<sup>7</sup>). All those scoring 3 or more were included in the second phase sample together with a 1 in 4 random sample of those scoring 2 or less. We chose a low threshold to ensure that few cases would be missed. The threshold has been validated in previous general population surveys<sup>7</sup> and used with African Caribbeans in primary care.<sup>8</sup>

Second phase interviews included the schedules for clinical assessment in neuropsychiatry.<sup>9</sup> This is an updated version of the well established and standardised present state examination. The instrument, which was administered by an experienced trained clinician, uses flexible questioning about symptoms and clinical judgment to rate severity. Diagnoses of mental disorders and index of definition (measure of severity) are made by computer algorithm, according to criteria described in the international classification of diseases (ICD-10). To address concerns about validity we used computer programs to convert data to the previous version of the present state examination and ICD-9. This did not alter our results.

The second phase also included the short explanatory model questionnaire, a semistructured interview assessing help seeking behaviour.<sup>9</sup> Subjects' attitudes and beliefs about their illness, and any help sought in the past six months, were recorded in their own words. We obtained the participants' consent to examine general practitioners' case notes to confirm the frequency

and content of consultations; consent had previously been obtained from the doctors.

### Sampling

We obtained a random sample from family health services authority population registers of four participating general practices in central Manchester (Moss Side and Hulme), where over half of Manchester's 10 000 African Caribbean population live. Sampling was done between September 1993 and February 1996 in collaboration with a comparative survey of nutrition, diabetes, and hypertension being run by one of the authors (JKC).<sup>10</sup> General practitioners' records were checked to confirm that subjects were still registered. Those who were dead or had changed address were removed from the final denominator.

### Procedure

Each person was contacted by telephone, post, or home visits. Non-respondents were those who refused to participate, consistently failed to keep appointments for interviews, or were unavailable after at least five home visits. Subjects were interviewed by prearranged appointment at home or in their doctor's surgery. Demographic and other health data were collected, and the first phase psychiatric screening instrument administered. Ethnic group was categorised by the subject from the list of 1991 census categories. Black Caribbean and black other (Caribbean) categories were combined to form the category African Caribbean. (As place of birth and that of parents were also recorded Asian or African "black other" subjects were not included.) Respondents selected for the second phase were interviewed at home by the research psychiatrist (CMS). Ethical approval was obtained from the Manchester Health Commission.

### Analysis

Data were analysed with SPSS/PC+. We calculated prevalence estimates (and 95% confidence intervals) according to the method of Pickles et al<sup>11</sup> for men and women separately, and in total, for each ethnic group.

## Results

### First phase

We contacted 1467 people; 590 were no longer resident or registered with the index general practices and 13 had died. Of the 864 remaining, 131 refused to participate in the study and 121 were persistently unavailable. Thus 612 people (337 African Caribbeans and 275 white Europeans) completed screening; a 71% response rate.

Just over half the respondents were women (185/337 (55%) African Caribbeans and 140/275 (51%) white Europeans); mean ages were similar in the two groups (49.5 (SD 14.8) years and 51.3 (13.5) years). Denominators varied because subjects could decline to give data (table 1). Most of the African Caribbeans (238 (71%)) were born in the Caribbean, mainly in Jamaica (175/238 (74%)). Sixty two (23%) white Europeans were born abroad, with 38/62 (61%) born in Ireland. The economic and employment indicators were broadly similar in the two ethnic groups and showed the extent of deprivation experienced in this community (table 1). Similar proportions of each ethnic group scored 3 or

**Table 1** Social and economic characteristics of phase 1 respondents

	No (%) of African Caribbeans	No (%) of white Europeans	$\chi^2$ , P value
Marital status	n=336	n=274	16.2, 0.003
Single	111 (33)	56 (20)	(df=4)
Cohabiting or married	144 (43)	146 (53)	
Widowed	21 (6)	29 (11)	
Separated or divorced	58 (17)	42 (15)	
Other	2 (1)	1 (0.4)	
Level of education	n=332	n=273	15.5, 0.0085
None	0	1 (0.4)	(df=5)
Primary	10 (3)	7 (3)	
Secondary	237 (71)	223 (82)	
Vocational or technical	58 (17)	20 (7)	
University	21 (6)	18 (7)	
Other	6 (2)	4 (1)	
Annual income (£)	n=266	n=245	4.9, 0.42
<5000	124 (47)	104 (42)	(df=5)
-10 000	77 (29)	68 (28)	
-15 000	33 (12)	30 (12)	
-20 000	16 (6)	28 (11)	
-25 000	10 (4)	9 (4)	
>25 000	6 (2)	6 (2)	
Employment	(n=305)	(n=246)	
Employed	158 (52)	122 (50)	0.19, 0.67
Unemployed	147 (48)	124 (50)	(df=1)

more on the general health questionnaire: 110/337 (33%) of African Caribbeans and 83/275 (30%) of white Europeans ( $\chi^2 = 0.32$ ,  $P = 0.57$ ).

### Second phase

At the time of the second interviews five African Caribbeans and five white Europeans who had scored three or more on the general health questionnaire had died or moved out of the area; interviews were completed with 92 African Caribbeans (response rate 88%) and 62 white Europeans (response rate 79%). A random sample of those scoring below 3 was also identified; 53 African Caribbeans were contacted, of whom 49 were still resident and 35 completed interviews (response rate 71%). Similarly, 55 white Europeans were contacted, 50 were still resident, and 41 interviewed (response rate 82%).

A total of 29 African Caribbeans and 29 white Europeans were found to be "cases" (scoring 5 or more on the instrument's "index of definition"). Twenty eight African Caribbeans and 15 white Europeans had depressive disorders (ICD-10 codes F32, F33), of whom three African Caribbeans and four white Europeans also had anxiety disorders (F40, F41). One African Caribbean and 14 white Europeans had anxiety disorders without depression.

We found no overall difference in the weighted, one month period prevalence of depressive and anxiety disorders (table 2). The prevalence of anxiety disorders was significantly lower in African Caribbeans than in white Europeans. In contrast, the prevalence of depressive disorders was higher in African Caribbeans, although this was significant only for women (difference 8%; 95% confidence interval 1% to 15%).

### Help seeking behaviour by people with mental disorder

In response to the question "Do you have any problems with your health?" most "cases" reported some kind of psychological illness (24/29 (83%)

**Table 2** Weighted one month prevalence (95% confidence interval) of depressive and anxiety disorders in African Caribbeans and white Europeans

Disorder	African Caribbeans (%)			White Europeans (%)			Difference		
	Men (n=152)	Women (n=185)	Total (n=337)	Men (n=135)	Women (n=140)	Total (n=275)	Men (n=287)	Women (n=325)	Total (n=612)
Depressive or anxiety, or both	4 (1 to 7)	20 (14 to 26)	13 (10 to 16)	10 (5 to 15)	18 (12 to 25)	14 (10 to 18)	6 (0 to 12)	2 (-7 to 11)	1 (-4 to 6)
Depressive*	4 (1 to 7)	19 (14 to 25)	13 (10 to 16)	7 (3 to 11)	11 (6 to 16)	9 (6 to 12)	3 (-2 to 8)	8 (1 to 15)‡	4 (0 to 8)
Anxiety†	0	5 (2 to 8)	3 (1 to 5)	7 (3 to 11)	10 (5 to 15)	9 (6 to 12)	7 (4 to 10)‡	5 (-1 to 11)	6 (2 to 10)‡

\*Depressive episode or recurrent depressive disorder (ICD-10 F32, F33).

†Phobic and other anxiety disorders (F40, F41). ‡P<0.05.

**Table 3** Help seeking behaviour by participants defined as cases on study questionnaire

	African Caribbeans (n=29)	White Europeans (n=29)	P value*
Saw general practitioner in previous six months	22	21	1.0
Presented with psychological symptoms (low mood, sleep problems, worries, etc)	2	3	1.0
Mental disorder recognised by general practitioner	6	11	0.12
Sought non-medical help	12	5	0.082
Sought no outside help	5	3	0.71

\*Fisher's exact test

African Caribbeans and 25/29 (86%) white Europeans). Others denied they were ill or reported exclusively somatic symptoms or physical illnesses despite sufficient symptoms being evident during the psychiatric assessment to diagnose mental disorder.

Table 3 summarises patterns of help seeking behaviour. Most people had consulted their doctor, but few presented with psychological symptoms. General practitioners recognised a psychological problem in 6/22 (27%) African Caribbeans and 11/21 (52%) white Europeans who consulted them.

The commonest sources of non-medical help were the herbalist (or self treatment with herbal remedies from the Caribbean), which was cited by seven African Caribbean people, and the church (four people). Twenty African Caribbeans and 18 white Europeans saw their doctor but did not present with psychological symptoms. When those who sought no help at all were added 27/29 (86%) African Caribbeans and 26/29 (90%) white Europeans sought no medical help specifically for psychological problems, expressing the view that doctors would not be helpful for such problems. Beliefs expressed by African Caribbeans included: "the doctor can't help with this sort of problem"; "it's not an illness"; "I can manage on my own"; "doctors are there to give you tablets and I don't want tablets." White Europeans most commonly stated: "the doctor won't have time or isn't interested"; other beliefs were similar to those expressed by African Caribbeans.

### Key messages

- Most studies of ethnic differences in mental health focus on psychotic illness rather than common mental disorders
- In this inner city study the prevalence of anxiety and depression was similar in African Caribbeans and white Europeans
- Anxiety disorders were less common, and depression more common, in African Caribbeans than white Europeans
- Improved recognition and treatment of non-psychotic disorders are necessary, taking into account patients' views of their illnesses

## Discussion

This is one of the first population based surveys in Britain to address the prevalence of common mental disorders in African Caribbeans. The prevalence estimates are similar to those identified in recent general population surveys,<sup>12</sup> and in contrast to findings for psychotic disorders, show that in an inner city population the prevalence of anxiety and depressive disorder is similar in African Caribbeans and white Europeans.

There was no difference in medical help seeking between African Caribbeans and white Europeans with mental disorders. Although over 80% had consulted their doctor in the previous six months, most presented with somatic (rather than psychological) symptoms. Further research is needed to explore the differences in recognition rates by general practitioners as we did not have sufficient numbers to detect significant differences. The prominent belief that medical consultation would not be beneficial has implications for health promotion.

We recruited fewer subjects than we had intended. Lists of registered patients proved to be out of date as many people had changed address. Unfortunately, as the ethnicity of the members of the initial sample was unknown, any possibility of differential migration out of the inner city could not be addressed. Attrition between phases one and two was high but not linked to ethnicity, and this could be due to delay (in some cases) between the two phases. Using the general health questionnaire as a screening instrument with a 2/3 threshold had limitations. Although few true cases were missed, the false positive rate was high. Delay before second phase interviews may also have contributed to this.

The researchers were not blind to the ethnicity of the respondents, and the psychiatric researcher (CMS) was white European. The criticism of eurocentrism could be made, but it is not obvious if this would have led to underestimation or overestimation of psychiatric symptoms among African Caribbeans.

The differences in rates of anxiety (lower in African Caribbeans) and depressive disorders (higher in African Caribbean women) between the ethnic groups agree with previously reported trends.<sup>4</sup> This difference could be explained by genetic or vulnerability factors or by exposure to different social or environmental experiences.<sup>13</sup> African Caribbeans may be experiencing more events and difficulties associated with loss, and fewer associated with fear, than white Europeans.<sup>14</sup>

Only a minority of people with mental disorders found by the prevalence survey were being treated by their general practitioner. Low recognition of mental disorders remains the greatest barrier to care for both African Caribbean and white European people with depression and anxiety. The training of doctors in the care and management of these common mental disorders

ders therefore needs to continue to focus on the somatic presentation of mental disorder (somatisation) coupled with the development of therapeutic models that include social, psychological, and pharmacological treatments.<sup>15</sup>

In conclusion, this study shows that common mental disorders are similarly prevalent in African Caribbeans and white Europeans living in a British inner city. The emphasis on psychotic disorders in both research and service provision should not obscure the fact that depression and anxiety afflict far more people of all ethnic groups. There is no evidence that ethnicity is associated with more or less morbidity, but it may be an important factor in determining what type of disorder is experienced.

We thank the researcher workers of the diabetes and hypertension project; project assistants Colin Moore, Jane Rogers and Amanda Lee; and the patients and staff of participating general practices.

Contributors: CMS and FC conceived and designed the study and interpreted the results. FC obtained funding on CMS's behalf, supervised the training, and is the study guarantor. CMS supervised project assistants, collected and analysed data, and wrote the manuscript. JKC and LR conceived and ran the comparative survey of nutrition, diabetes, and hypertension and supervised data collection. BT contributed to study design and, together with CMS, carried out statistical analysis. All authors edited the manuscript.

Funding: Wellcome Clinical Epidemiology Training Fellowship (CMS).

Competing financial interests: None declared.

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(Accepted 28 October 1998)

## Commentary: Counting heads may mask cultural and social factors

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This study on the prevalence of common mental health disorders is commendable, but the findings should be interpreted with caution. Cross cultural studies of mental health are controversial and difficult to conduct and interpret.

Ethnicity is a complex variable.<sup>1</sup> For example, African Caribbean, which is used in this study, encompasses people from a multitude of islands with diverse cultures. Presentation and prevalence of illness is also likely to vary. The broad term white European also encompasses many ethnic groups, including Polish, Bosnian, and Irish.<sup>2</sup> These groups have different rates of mental illness. For example, compared with white English people the Irish have a high rate of diagnosed mental health problems.<sup>3</sup> Place of birth is also relevant. The experiences, health beliefs, and patterns of health seeking behaviour of a young African Caribbean born in the United Kingdom are likely to differ from those of an older migrant from Jamaica. In addition, over a fifth of white Europeans in this study were born abroad and may have common experiences with some of the migrants from the Caribbean, particularly of discrimination.

The use of self assigned ethnicity based on census categories is a pragmatic approach but has limitations.<sup>4</sup> Other data such as language spoken, religion, place of birth, and social and economic factors are necessary to provide an informed picture.<sup>5</sup> The quoted prevalences of anxiety and depression in African Caribbeans and

white Europeans could therefore mask variations between different ethnic groups and the effects of physical factors and social inequalities.

Cross cultural psychiatry aims to provide a scientific basis for the study and comparison of mental health across cultures. Most traditional psychiatric instruments have been devised for a North American or north European population and are not necessarily valid in other groups.

There are two approaches to using psychiatric instruments in different cultural groups. The "emic" approach is a within culture approach. It uses culturally defined terms and an instrument devised for the particular cultural group. The findings are specific to the experience and presentation of illness in that culture.<sup>6</sup> For example, a recent study with older Caribbean people in London constructed an interview schedule for emotional distress using vignettes and interviews with carers and older Caribbeans with mental health problems.<sup>7</sup> The approach aims to identify those people who would be recognised as being ill or impaired by those of the same culture and attempts to overcome ethnocentric perspectives. However, instruments developed by this method are not transferable to other cultural or social groups and cannot provide comparative data.

The "etic" approach is an across cultures approach. It uses terms that are similar across different cultures and pre-existing instruments. The approach is based on the assumptions that the underlying features of

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common mental disorders, such as depression, are similar across cultures<sup>8</sup> and that no important culture-specific symptoms or presentations would be missed. The charges of ethnocentricity can be reduced by assessing the instrument's performance and acceptability within a new population. This may require adaptations to the standard instrument. The general health questionnaire has been extensively validated in other cultures,<sup>9</sup> but not specifically with an African Caribbean population in the United Kingdom.

The etic method allows for comparisons between cultural groups. However, if supposedly universal symptoms do not occur in a particular cultural group or do not have the same meaning the result will be invalid and misleading.

Shaw et al used an etic approach to screen for and identify cases and then interviewed these cases with an emic schedule. People whom the initial instruments failed to recognise as distressed would have been missed. By only interviewing identified cases the authors may have lost rich information on cultural aspects of mental health. This is important for those working in primary care, where most people with

mental illness are seen and cared for, and where the iceberg of unmet need almost certainly lies.

The authors have attempted a difficult study and provided some insights into mental health problems in different cultural groups. However, prevalences derived from such a heterogeneous sample may conceal important variations among subgroups. Counting heads is important, but further attention must be given to the complexity of cultural and social factors in the experience of mental illness.

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## Retrospective analysis of census data on general practitioners who qualified in South Asia: who will replace them as they retire?

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### Abstract

**Objectives** To determine the number and geographical distribution of general practitioners in the NHS who qualified medically in South Asia and to project their numbers as they retire.

**Design** Retrospective analysis of yearly data and projection of future trends.

**Setting** England and Wales.

**Subjects** General practitioners who qualified medically in the countries of Bangladesh, India, Pakistan, and Sri Lanka and who were practising in the NHS on 1 October 1992.

**Main outcome measures** Proportion and age of general practitioners who qualified in South Asia by health authority; the Benzeval and Judge measure of population need at the health authority level.

**Results** 4192 of 25 333 (16.5%) of all unrestricted general practitioners practising full time on 1 October 1992 qualified in South Asian medical schools. The proportion varied by health authority from 0.007% to 56.5%. Roughly two thirds who were practising in 1992 will have retired by 2007; in some health authorities this will represent a loss of one in four general practitioners. The practices that these doctors will leave seem to be in relatively deprived areas as measured by deprivation payments and a health authority measure of population need.

**Conclusion** Many general practitioners who qualified in South Asian medical schools will retire within the next decade. The impact will vary greatly by health authority. Those health authorities with the greatest number of such doctors are in some of the most deprived areas in the United Kingdom and have experienced the most difficulty in filling vacancies. Various responses will be required by workforce planners to mitigate the impact of these retirements.

### Introduction

There is concern in some circles that the future supply of general practitioners will be inadequate to meet the needs of an NHS led by primary care.<sup>1-2</sup> Others are not convinced and note a lack of definitive evidence.<sup>3</sup> Many of the issues relate to changes in the career paths of general practitioners, particularly young ones.<sup>4-9</sup> Decreased popularity of general practice as a career choice,<sup>6-10</sup> drop outs from medical school,<sup>11-12</sup> and early exits from practice by young general practitioners<sup>7</sup> are some of the key issues.

Another issue that will influence the future supply of general practitioners is the expected retirement of doctors who qualified in South Asian medical schools (in Bangladesh, India, Pakistan, and Sri Lanka) and emigrated to the United Kingdom in the 1960s and 1970s primarily to fill a perceived staff shortage in an

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*BMJ* 1999;318:306-10