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Review Article

Mental Illness Among Immigrant Minorities in the United Kingdom

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Cross-cultural studies on immigrants from Pakistan and the New Commonwealth are reviewed, with emphasis on epidemiology and differences in clinical presentation. Their referral to the psychiatric service is also examined and deficiencies are noted. Awareness of transcultural issues among health professionals need to be increased in order to achieve diagnosis and improvements in health care.

Just under 3% of the population in Britain today were born in the countries of the New Commonwealth and Pakistan (Registrar-General, 1983). The majority came from the West Indies and the Indo-Pakistan subcontinent during the 1950s and 1960s to satisfy the need for unskilled labour. Others, mostly from Africa, arrived for the purpose of further education. With the passage of time a British-born generation has emerged, but they have received relatively less attention from researchers than their parents who migrated to this country. This is largely due to the practice of using the place of birth to identify subjects for research.

Earlier migrations from Ireland and Eastern Europe have been associated with increased rates of psychiatric disorder (Clare, 1974; Murphy, 1955; Mezey, 1960). Murphy (1977) has put forward three explanations for this relationship. Firstly, the observed differences may have little to do with the migration itself, and may only reflect a different pattern of disorder in the migrant's culture of origin. The second explanation, known as the selection-theory, applies mainly to schizophrenia and suggests that during the early incipient phase of the illness the likelihood of migration is increased because of failing interpersonal relationships (Ødegard, 1932). The third explanation lies in the stress associated with migration and resettlement. Many endure hardships, such as split families, prejudice, poor housing and employment (Cox, 1977; Hashmi, 1968; Littlewood & Lipsedge, 1982), and single men may experience sexual difficulties (Risso & Boker, 1968). Social isolation and insecurity provide fertile ground for paranoia (Eitinger, 1960). To cope successfully one has to undergo a series of internal changes very similar to the process of bereavement, in which the old culture is abandoned and the threat to one's identity resolved (Garza-Guerrero, 1974).

Recent reviews of the transcultural research undertaken in this country have noted the problems in gauging the true state of psychiatric morbidity among immigrants (Littlewood & Lipsedge, 1979; Rack, 1982*a*; Cochrane, 1983). Earlier studies (Gordon, 1965; Hemsi, 1967) failed to recognise demographic differences when comparing results with the native British population. Immigrants have a younger age structure and show an excess of males in the initial stages of immigration, before being joined by their wives and children. British-born control groups are often drawn from the same inner city areas where most immigrants reside. These areas are known to have unusually high levels of morbidity (Faris & Dunham, 1939; Hare, 1956). It is also uncertain whether variables such as social class and occupation carry the same meaning for each groups, as menial employment in this country may nevertheless represent an improvement over a peasant economy (Stopes Roe & Cochrane, 1980). Accurate assessment is often hampered by lack of epidemiological data for the country of origin. Much research also assumes a homogeneity among immigrant groups, which is only partly justified. Although many West Indians come from Jamaica, others originate from islands that differ markedly in their culture, size and economic activity.

Immigrants from the Indo-Pakistan subcontinent have been grouped into those from India and Pakistan, neglecting religious, cultural and language differences. Some studies have inappropriately placed Asians from East Africa together with those from the subcontinent, thereby failing to take into account the many differences – in particular, their arrival in this country as refugees. Finally, there are difficulties of small sample size, especially in the evaluation of individual diagnoses.

West Indians

Studies based on hospital admissions (Cochrane, 1977; Dean *et al*, 1981; Carpenter & Brockington,

1980) and on the Camberwell Case Register (Bagley, 1971*a*; Rwegellera, 1977) show an increased overall rate of disorder among West Indians. The sex difference is as expected, with an excess of females (Cochrane, 1977; Dean *et al*, 1981, Carpenter & Brockington, 1980). A recent study (Ineichen *et al*, 1984) asserted that there was no significant difference in the rate of voluntary hospital admissions between West Indian and English patients living in the centre of Bristol. One in six of the population in these inner city districts belonged to ethnic minorities, and this was reflecteu in the proportion of voluntary admissions during 1981: 30 out of 175 admissions. However, although 16 admissions were of West Indians the authors made no direct comparison with census statistics for West Indians alone. Furthermore, as already noted, comparisons with inner city areas may in itself indicate an excessively high rate. By contrast, West Indians were noticeably over-represented among compulsory admissions (Harrison *et al*, 1984), numbering 27 out of the 89 formal admissions between 1978 and 1981.

Since they sample hospital in-patients, these studies are biased in favour of the major psychiatric disorders and may therefore relate more narrowly to those illnesses that require admission rather than to the total psychiatric morbidity. A more representative sample may be provided by the Case Register, which documents all contacts with the psychiatric service in a defined area. However, not all psychopathology reaches the attention of the psychiatrist. Two small general practice studies (Pinsent, 1963; Kiev, 1965), undertaken on what were at the time recently arrived immigrants, showed an increased morbidity; no similar studies appear to have been carried out since then.

With a few exceptions (Rwegellera, 1977; Hemsi, 1967) schizophrenia appears to be the commonest diagnosis (Cochrane, 1977; Dean *et al*, 1981; Gordon, 1965; Bagley, 1971*a*; Bebbington *et al*, 1981). This is in keeping with international research findings (Sanua, 1969) and lends support to the selection theory. However, those British studies that have defined their categories more strictly have shown an increase of atypical psychosis. Tewfik & Okasha (1965) found that only 155 of psychotic West Indian in-patients suffered from an illness typical of those seen in Britain: half suffered from mania and half from chronic hebephrenic schizophrenia. The remainder appeared to have a schizophrenia-like illness characterised by a continuum of symptoms with confusion and paranoid symptomatology at either end. The overall prognosis was good, with 43% making a complete recovery and 77% returning to work. The authors felt that this illness was a dissociative one and a response to stress. Similarly Gordon (1965) found schizoaffective disorder among a quarter of his admissions, and also diagnosed acute schizophreniform reaction with a greater than average frequency. Less than 5% of his series had a positive family history for psychosis, and only 7% had been hospitalised prior to migration.

These early studies may be criticised on methodological grounds, and comparisons with British-born patients are unreliable. Nevertheless, these clinicians did find that a large proportion of the West Indian patients that they treated presented atypically. Despite the passage of years these atypical psychoses have been reflected in more recent epidemiological research. On reanalysis of hospital disgnoses Carpenter & Brockington (1980) showed that nuclear schizophrenia fell from a previously high rate to within the expected British range, while paranoid psychosis was increased. A criticism of this study, however, is that the ethnic minorities were insufficiently differentiated. Africans and West Indians were combined for the purpose of hospital diagnosis, and the reanalysis was carried out on immigrants as a whole. Littlewood & Lipsedge (1981*b*) studied a small group of sixteen patients with religious delusions but lacking first rank symptoms. They were typically women belonging to charismatic churches whose psychoses followed a precipitating event and whose illness was of short duration. With the passage of time, and presumably the influence of a dominent culture, the presenting picture changed to one of depression. Although the acute psychotic reaction is widely recognised in developing countries (German, 1972; Littlewood & Lipsedge, 1981*b*), it is not a diagnostic category generally used by British psychiatrists. The blanket use of schizophrenia as a diagnosis may mask such distinctions.

Symptoms prominent in schizophrenia and allied disorders are religious beliefs (Kiev, 1963; Gordon, 1965; Ndetei & Vadher, 1985*b*) and paranoid delusions (Gordon, 1965; Rwegellera, 1977; Ndetei & Vadher, 1984*c*). The former arise out of the fundamentalist Christian beliefs of the West Indian community (Kiev, 1963), while the latter has a recognised association with migration. Schneider's first rank symptoms are present in 43–53% of patients with schizophrenia (Chandrasena, 1980; Ndetei & Vedher, 1984*d*) as opposed to 72% of British-born patients (Mellor, 1970). Disturbed behaviour also appears to be more common prior to admission (Harrison *et al*, 1984; Rwegellera, 1970).

The sex ratio for patients with affective disorders may be more exaggerated than that for British patients (Cochrane, 1977; Bebbington *et al*, 1981; Hemsi, 1967) but overall frequencies are similar

(Dean *et al*, 1981; Carpenter & Brockington, 1980; Bagley, 1971*a*). A community survey noted that the sex ratio narrowed with age, although the severity of the depression was not clearly defined (Burke, 1984). Mania is significantly more common among West Indians (Leff *et al*, 1976; Bebbington *et al*, 1981). Rack (1982*b*) has attributed this to reactive mania, a type of stress reaction (Tyrer, 1982). Alternatively, cyclothymic individuals may be more inclined to migrate.

The results for neuroses and personality disorders are inconsistent, with some studies showing reduced rates (Cochrane, 1977; Bebbington *et al*, 1981; Bagley, 1971*a*; Gordon, 1965), increased rates (Rwagellera, 1977) or no apparent difference (Dean *et al*, 1981; Carpenter & Brockington, 1980) when compared with British control groups. This ambiguity is significant because these 'lesser' disorders are much commoner than the major psychoses among British-born patients. This discrepancy may reflect a difference in the utilization of the psychiatric services.

Burke (1976*a*, 1979) found the attempted suicide rate among those who had migrated to be greater than the indigenous rate for Jamaica, but it had not reached the same level as the native British population. He attributed this to the problems of acculturation and adaptation to an industrialised urban environment. However, this study was a retrospective one, and the inclusion of only those cases where the place of birth had been recorded may have biased the sample. The suicide rate is less than that of the native British rate, and is also one of the lowest among all the ethnic minorities (Cochrane, 1977; Adelstein & Mardon, 1975). As shown by research in Australia, the indigenous pattern of suicide among immigrants may be expected to persist unchanged for many years (Burvill *et al*, 1982).

West & Farrington (1973) found an increase in delinquency among West Indian boys despite a low rate of criminality in their parents (Rutter *et al*, 1975). Although Burke (1982) ascribed this to repeated separation experiences, his study of eighteen female offenders was too small to substantiate his assertion, particularly with regard to male offenders. Studies of West Indian children showed an abnormally high rate of conduct disorders (Rutter *et al*, 1974; Nicol, 1971) of a kind that was unusual in many respects. It occurred predominantly in girls, was specific to the school situation and was not associated with impaired peer relationships (Rutter *et al*, 1974). It also correlated with poor performance on tests of intellect and reading abilities (Yule *et al*, 1975). Suggested explanations included overcrowded home conditions, deprivations in early life, particularly for those born in the Caribbean islands, and the poor quality of the schools themselves (Rutter *et al*, 1974; Yule *et al*, 1975). Cochrane (1979) replicated Rutter's study six years later, and although he found some support for the previous trend it failed to reach statistical significance. He concluded that the educational system may have successfully assimilated immigrant children during those intervening years.

In order to evaluate epidemiological findings accurately one must consider the interaction and referral patterns of West Indians with the Health Service. Burke (1984) concluded that general practitioners failed to reach a psychiatric diagnosis for 21.3% of West Indians identified as being depressed in a survey. This was significantly greater than the 12.8% identified in an English control group. These subjects, drawn from a general practice register, were initially screened with the General Health Questionnaire and probable cases were then interviewed. Although depression was operationally defined the criteria were not clearly described; nor was it possible for the assessment to be blind.

Subsequent referral of West Indians to the psychiatric service differs from the indigenous British population both in the high rate of compulsory admissions and in the degree of involvement by an agency other than a general practitioner. Compulsory admissions have correlated with the excessively high rate of psychosis among West Indian admissions (Harrison *et al*, 1984; Rwegellera, 1980; Littlewood & Lipsedge, 1981*a*; Gordon, 1965). Rwegellera (1980) analysed the Camberwell Case Register for psychiatric referrals during the 1960s, including out-patients and domiciliary contacts. Significantly, only half of the West Indian patients were referred by general practitioners or hospital doctors, in contrast to 61% for a well-matched English control group. Many were brought by relatives. Another study of hospital admissions during the 1960s found support for this trend, although West Indians were not differentiated from other New Commonwealth immigrants (Hitch & Clegg, 1980). Recently, Harrison *et al* (1984) showed greater police involvement in the referral of West Indians from an inner city area, compared with indigenous British patients living in the same locality. Littlewood & Cross (1980) also found self-referrals to be more common among a mixed group of New Commonwealth immigrants. There are correlations between compulsory admissions, psychosis and disturbed behaviour (Harrison *et al*, 1984; Rwegellera, 1980). Relatives may prefer to resort to legal sanctions and call the police to avoid the stigma of mental illness (Hitch & Clegg, 1980). As a minority group West Indians may also feel alienated from

society's institutions, and this may affect their attitude to general practitioners. Their reluctance may also be related to ignorance of how a GP can help, or the belief that he is not the correct person to consult regarding mental illness (Rwegellera, 1980). The authorities may be less tolerant of deviancy among immigrant groups, and some have regarded compulsory admission as a form of social control (Mercer, 1984). Most importantly, if the illness remains untreated for a long period the patient may become more seriously ill, losing insight and necessitating a formal admission. Harrison *et al* (1984) found that many West Indians formally admitted were young women living with their families. Despite this close contact, many were detained by police in public places and brought to see a psychiatrist. In view of the research pertaining to atypical psychosis one may suspect that earlier intervention and treatment may prevent the psychosis developing. Although Littlewood & Lipsedge (1982) note that the sudden onset of the acute psychotic reaction may prevent early detection, the psychological well-being of these patients prior to onset has not been proven. Depression and minor psychiatric illness may remain untreated for the reasons discussed above. Deterioration may lead to a psychosis through subcultural or dissociative mechanisms. This is an area which requires further research.

At its height, immigration from the West Indies was unrestricted and even encouraged by British employers through recruiting drives. Although such conditions favour the selection model, this may only partly explain the apparent excess of psychoses. The duration of stay in the United Kingdom prior to the onset of symptoms is a relatively lengthy one of 5–10 years (Littlewood & Lipsedge, 1981*a*; Bagley, 1971*a*). This suggests that stress plays a significant role, whether as a precipitating factor in those biologically predisposed (Bagley, 1971*a*) or as an aetiological agent in a reactive psychosis (Littlewood & Lipsedge, 1981*b*). Such stress has many facets. Bagley (1971*b*) advocated a model of 'status inconsistency' where the subject strives to achieve goals but fails to recognise the restriction of opportunity implicit in the environment. The discrepency between the perceived ideal and the true self results in loss of self-esteem. Drawing on the learned helplessness model, Fernando (1984) argued that racism engendered depression by denying its victim any control over external events. Poor self-esteem, rejection and loss exacerbate the phenomenon. These complex theories are difficult to test in practice, as it would require a large, well-constructed study to eliminate the many associated factors. In a community study measuring individual stresses Burke (1980) was unable to demonstrate overall differences, although he noted an emphasis on interpersonal conflicts among West Indians which may have been enhanced by greater isolation from neighbours and relatives.

Indians and Pakistanis

Epidemiological studies on overall morbidity have produced conflicting results. Carpenter & Brockington (1980) showed that Asians have an increased rate of first-time hospital admissions, although they failed to differentiate between those born in India and Pakistan. Dean *et al* (1981), with closer attention to the place of origin, showed that Pakistanis have fewer first-time admissions than the British, while Indians have a higher rate. Cochrane (1977) analysed national hospital admissions for 1971 and showed that both Indians and Pakistanis have fewer hospital admissions than the British (including readmissions). The comparability between the studies by Dean *et al* (1981) and Cochrane (1977) is hindered by differences in techniques used to analyse the data. Furthermore, Dean *et al* (1981) were able to identify the place of birth in a higher proportion of their sample; this information was absent in 30% of national admissions. A further source of error is the hidden number of patients who, though born in India, come from British colonial families.

Schizophrenia is the commonest hospital diagnosis in both populations, and occurs with a higher than expected frequency (Cochrane, 1977; Dean *et al*, 1981; Carpenter & Brockington, 1980; Shaikh, 1985). When readmissions are excluded, Pakistani men fall to within the British range (Dean *et al*, 1981). Rack (1982*b*) has drawn attention to the pitfalls of diagnosing schizophrenia when English is not the first language and where cultural beliefs differ. Ndetei & Vadher (1984*d*) found that Schneider's first rank symptoms were present in only 58% of Indian immigrants where schizophrenia was diagnosed according to the CATEGO programme. Unlike research on West Indians, atypical psychoses among Asians have received relatively little attention. When noted, they do not appear to be increased, although these studies were based on routine hospital diagnoses (Dean *et al*, 1981; Carpenter & Brockington, 1980).

Studies both of first admissions (Dean *et al*, 1981; Carpenter & Brockington, 1980) and the Camberwell Case Register (Bagley, 1971*a*; Pinto, 1970) show no significant difference in the rate for affective disorder in comparison with the native British population, although Cochrane (1977) found it to be comparatively less when all admissions for 1971 in England and Wales were analysed. In Asiatic and other

developing countries depression is characterised by prominent somatic symptoms, whereas those psychological features more usually recognised in the West may be concealed or even absent (Teja *et al*, 1971; Murphy *et al*, 1967).

In-patient studies show wide variations in rates for neuroses and personality disorders which nevertheless remain consistently less frequent than the psychoses (Cochrane, 1977; Dean *et al*, 1981; Carpenter & Brockington, 1980; Shaikh, 1985; Pinto, 1970). Clinical features of neuroses differ from those of British-born patients. Ndetei & Vadher (1984*b*) analysed the case notes of a mixed group of immigrants using the syndrome check list and CATEGO programme. In studying anxiety and related syndromes they found that the tension category, which comprises mainly physical symptoms, was significantly increased in African, Asian and Caribbean patients. In addition to this theme of somatisation, Rack (1982*b*) has also drawn attention to the effect of dissociation in hysteria. A pseudo-psychosis characterised by hallucinations is not uncommon in young Asian women and can be regarded as a means of communicating distress akin to the overdose in English patients.

Attempted suicide has increased following migration but remains less than the British rate (Burke 1976*b*). The principal method used is similar to that of English patients, having changed from corrosives and insecticides to psychotropic drugs. Surveys of childhood disorders using Rutter's method have shown a reduced rate of conduct disorder in Indian and Pakistani school-children (Kallarackal & Herbert, 1976; Cochrane, 1979). Cochrane attributed this to better psychological health among Asian immigrants, while Kallarackal & Herbert felt that the quality of Indian family life helped reduce any disturbance. There was an indication of increasing maladjustment with longer residence in the United Kingdom, but this failed to reach statistical significance.

Findings based on hospital admissions may be influenced by differences in utilisation of the psychiatric services. Some patients may avoid the service entirely and seek help from traditional healers. Aslam (Rack, 1982*b*) found that Hakims, practitioners using an Islamic system of medicine, diagnosed mental problems in a quarter of their patients. Many of these Asian immigrants complained of psychosexual difficulties. Brewin (1980) showed that Asians visited their general practitioner as frequently as British-born controls, yet their admission rate for psychiatric disorder was reduced. He concluded that general practitioners had not detected these disorders because of a failure of communication. The unproven assumption behind this reasoning is that the distribution of psychiatric and physical illnesses were the same in each group. Although studies of mixed groups of immigrants show high rates of formal admissions (Hitch & Clegg, 1980), Shaikh (1985) reported no significant differences among Asians living in Leicester, even though schizophrenia was more commonly diagnosed. Pinto (1970) used the Camberwell Case Register to compare 49 Asian admissions, born in the Indian subcontinent, with an English control group matched for diagnosis. There was no significant differences in compulsory admissions, nor in the number of referrals by general practitioners. There was a higher rate of self-referrals by Asian patients and Asians did show a slightly longer duration of symptoms prior to admission. Pinto inferred from this that Asians may avoid seeking medical help, whether through ignorance or difficulties in communication. However, these conclusions are based on a small number of patients.

Cochrane undertook a series of community surveys using the Langner 22 Item Index to detect minor neurotic symptoms. He compared two samples of Indians and Pakistanis, selected to represent their respective communities by age and sex, with a matched British-born control group (Cochrane & Stopes Roe, 1977). Pakistani men scored significantly fewer psychological symptoms than the British controls, while all other scores were equivalent. The symptoms derived by the Langner index did not constitute psychiatric cases, and they were also elicited by lay research workers. A larger multicentre study compared Indian and Pakistani-born with Irish-born subjects (Stopes Roe & Cochrane, 1980). Unlike the previous study this survey was randomised by the research worker choosing houses at random to visit. However, the sample was still limited to high density immigrant areas. The Pakistanis now achieved very high scores, while the Indians scored less than the Irish. The low score for Indians was supported by a similar study comparing Indian, Pakistani and British-born subjects (Cochrane & Stopes Roe, 1981).

On the basis of both his in-patient and community studies Cochrane inferred that Indians have less psychological ill-health than Pakistanis and that the two communities together suffer less psychiatric morbidity than the general British population. It is arguable whether the two types of studies can be used in support of one another, as they measure different phenomena. He specualted that the complex and restrictive nature of migration from the Indian subcontinent deterred all but the most determined and psychologically robust, resulting in a reduced morbidity among Asian immigrants. This lowered

morbidity has not been consistently demonstrated, and the discrepancies found between first time and total admissions may imply a low readmission rate. Asian patients may either receive greater support from their relatives than their British counterparts or they may return to the Indian subcontinent to seek treatment. Cochrane (1983) further speculated that improved socioeconomic status and upward mobility contributed to the low Langner scores among Indians (Stopes Roe & Cochrane, 1980). Pakistanis have lower socioeconomic origins and have experienced little upward mobility since arrival in this country. Nevertheless, he failed to demonstrate a correlation between social class and Langner scores among Pakistanis (Cochrane & Stopes Roe, 1981). A further consideration has been the degree of acculturation and exposure to the indigenous British culture. An insular lifestyle may protect agains such stress and any resultant psychological problems (Westermeyer *et al*, 1983). However, Pakistani women showed high Langner scores despite only 10% being at work (Stopes Roe & Cochrane, 1980).

The apparent contradictions between the studies discussed above may be lessened by a closer attention to the hidden variables. Where possible, samples should be large enough to take into account factors such as regional origin and religion. Research may also be valuably directed towards the areas of initial contact between the Health Service and the Asian patient.

Africans

Bagley (1971*a*), using a case register, analysed all contacts with the psychiatric services in Camberwell between 1966 and 1968. Of all the immigrant minorities the Africans showed the highest prevalence rate for all disorders, it being six times that of the indigenous British population. Using a different method Dean *et al* (1981) confirmed this greater frequency among hospital admissions, although their sample included East African Asians.

The incidence of schizophrenia is high among African immigrants (Dean *et al*, 1981; Bagley, 1971*a*; Rwegellera, 1977; Littlewood & Lipsedge, 1981*a*), and Copeland (1968) found that two thirds of West African in-patients suffered from schizophrenia or schizoaffective disorders, although research bias may have influenced the admission procedure (Rwegellera, 1980).

At the time these studies were carried out there was comparative freedom of movement for foreign students to enter the United Kingdom to study. Young Africans with a liability to schizophrenia and poorly adjusted within their own community may have found it relatively easy to enter the United Kingdom as students with Commonwealth citizenship. Both Rwegellera (1977) and Littlewood & Lipsedge (1981*a*) found that the onset of symptoms occurred much earlier in Africans than in other immigrant groups. Characteristic features of the psychotic breakdown were paranoid delusions, magico-religious ideas and hypochondriasis (Ndetei & Vadher, 1984*c*, 1985*b*; Rwegellera, 1970; Littlewood & Lipsedge, 1981*a*). Paranoid ideas involving witchcraft or poisoning and directed towards fellow Africans were often found to be subcultural and to carry less weight when diagnosing schizophrenia. More typical of schizophrenia were delusions concerning Europeans and incorporating twentieth century technology (Copeland, 1968; Lambo, 1955; Littlewood & Lipsedge, 1981*a*). Grandiose delusions occur commonly in all types of psychoses among Africans and Jamaicans, and correlate with religious fervour (Ndetei & Vadher, 1985*a*; Lambo, 1955; Copeland, 1968). Disturbed behaviour is frequent and has been attributed to either learnt cultural role models or to gross anxiety engendered by magical beliefs (Rwegellera, 1980, 1970). Excluding first rank symptoms, Ndetei & Vadher (1984*e*) found that hallucinations of all types occurred more frequently in African, Asian and Caribbean patients compared with English-born controls.

In recent years Ndetei & Vadher have published a series of studies on individual symptoms based on a retrospective analysis of case notes using the Syndrome Check List. The retrospective nature of their work limits its value, but there are few comparable studies in the field. They found that first rank symptoms are present in only a third of schizophrenias diagnosed according to the CATEGO programme (Ndetei & Vadher, 1984*e*). This agrees closely with Chandrasena (1980), who used the same instrument on a different sample. This goes some way towards confirming the reliability of these studies. In Nigeria 63% of patients with schizophrenia were found to have first rank symptoms (Carpenter & Strauss, 1974). An unusual feature in the United Kingdom is the distortion of the sex ratio such that men exceed women among those admitted for schizophrenia (Dean *et al*, 1981; Rwegellera, 1977) although women do appear to have an increased admission rate for atypical psychoses (Dean *et al*, 1981). Although the acute psychotic reaction is recognised in Africa (German, 1972), British studies dealing with this subject have been limited by sample size (Littlewood & Lipsedge, 1981*b*).

Affective and neurotic disorders in Africans share many of the features discernable in other New

Commonwealth groups. Ndetei & Vadher (1984*a*) noted that depression was rarely diagnosed by hospital clinicians, but when they reanalysed using the Syndrome Check List they found an excess of psychotic and retarded depressions. However, other studies suggest that affective disorders are well recognised and not under-represented (Dean *et al*, 1981; Rwegellera, 1977; Bagley, 1971*a*). Studies of first admissions and case register contacts (Dean *et al*, 1981; Bagley, 1971*a*) have shown a reduced rate for neuroses and personality disorders compared with the British-born. By contrast Rwegellera (1977), examining roughly the same data as Bagley, found that these disorders were increased to the extent of being the commonest diagnoses.

In a large, well-matched sample Rwegellera (1980) found that West Africans exceeded both West Indians and English controls in the rate of compulsory admissions and disturbed behaviour. Elsewhere he demonstrated a correlation between this disturbed behaviour preceeding admission and social isolation (Rwegellera, 1970). Many were living on their own or with strangers, but there is no information available on the duration of their symptoms.

Epidemiological research carried out in Africa has shown the pattern of psychiatric morbidity to be similar to that of Western countries (Giel & van Luijk, 1969; Olatawura, 1982; German, 1972). Binitie (1981) found that less than 16% of new cases attending a clinic in Benin suffered from schizophrenia while up to 50% were treated for a psychoneurotic disorder. This is consistent with Rwegellera's findings, yet the bulk of British research has shown a marked excess of major psychoses.

As students Africans are exposed to stresses such as academic inadequacy, loneliness, career choice restrictions and accommodation difficulties (Anumonye, 1967). Nevertheless, of all immigrant groups African patients seem to conform most to the selection model. Now that the British government has ceased to fund universities for the training of overseas students, the nature of the African community in this country may be expected to change. This may in turn influence the future pattern of psychiatric morbidity.

Conclusion

Although 25 years have passed since the arrival of the first immigrants from the New Commonwealth, migration should not be regarded as a discrete event. Adaptation to a new environment may be undermined in later life by crises of career, family or impending old age. Afro-Caribbeans have an increased rate of first admissions in the 35–45 year age group, a range which is atypical for both schizophrenia and affective psychosis (Carpenter & Brockington, 1980). Persistence of morbidity has also been demonstrated in earlier migrations (Hitch & Rack, 1980). It is not certain to what extent acculturation may cause pathology such as hysteria, somatization and the acute psychotic reaction to be relinquished in favour of symptoms more characteristic of the host population. That this morbidity is not static has been underscored by evidence of a shift away from psychosis towards depression in individual patients (Littlewood & Lipsedge, 1981*b*). Longitudinal studies would help clarify this, but research is hampered by problems of phenomenology. The theoretical perspective of psychiatry in this country will not readily accept concepts such as the reactive psychosis (Strommgren, 1974) and this should be borne in mind when interpreting epidemiological results. On the other hand, overcaution in assessing symptoms in culturally distinct patients may lead to an emphasis on the unusual or atypical disorder when a diagnosis such as schizophrenia may be more appropriate. A prospective study that did not rely on case records would help to improve our understanding.

The evidence suggests that earlier recognition and treatment of psychiatric disorder is needed. Education of health professionals may go some way towards facilitating access and improving the psychiatric care available. Accurate assessment of the immigrant patient demands adequate communication and an understanding of cultural influences (Cox, 1976, 1982). The emphasis on somatic complaints may delay diagnosis or direct patients to inappropriate hospital departments. Two areas where research may be of value are general practice and liaison psychiatry. The immigrant minorities are a factor which cuts across all psychiatric research, ranging from social psychiatry to clinical drug trials. An altered response to psychotropic drugs may arise out of diet, genetic differences in metabolism and cultural factors (Lewis *et al*, 1980; Allen *et al*, 1977). A wider acknowledgement of these issues would increase awareness and lead ultimately to improvements in health care. It also affords an opportunity to re-examine psychiatric concepts that have evolved within our own cultural frame of reference.

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