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**INCEPTION RATES OF SCHIZOPHRENIA IN THREE
ETHNIC GROUPS IN LONDON: SOCIO-DEMOGRAPHIC FACTORS**

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**Thesis submitted for the degree of Doctor of Philosophy to the University of
London Faculty of Medicine**



Statement of authorship

As the author of this thesis I have been responsible for all stages of research that comprised the development of the proposal, the design of the study, a large proportion of the field work in all stages of data collection and the writing of the thesis. Dr S. Herold was involved in setting up the practical aspects of the study at Ealing Hospital. Drs B. Corridan and R. Mallett assessed some initial contacts and Dr S. Rudge followed up a group of patients. Professor Julian Leff provided overall supervision on methodological and administrative issues and also carried out initial PSE assessments on patients in South Southwark.

Abstract

Inception Rates of Schizophrenia in Three Ethnic Groups

Comparing rates and symptoms of schizophrenia across cultures and different ethnic groups within the same cultural setting can help researchers and clinicians alike to identify aetiological factors. Such an approach can also determine strategy for service provision within the same geographical area. Previous studies on the rates of schizophrenia across African-Caribbean and white groups in the UK have reported up to twelve-fold differential in the rates. Only a few studies have ascertained the rates of schizophrenia among Asians and the findings from this group have been variable. Although Asians (people originating from the Indian sub-continent) and African-Caribbeans (people originating from the Caribbean countries) migrated to the UK for broadly the same reasons at roughly the same time comparative studies between the two groups, especially in relation to rates of schizophrenia, have been scanty.

In two catchment areas in West and South London, patients presenting for the first time with symptoms of psychosis to various psychiatric services were screened over a two-year period. One hundred and twenty-three patients passed the psychosis screen. Of these, one hundred were identified as having schizophrenia on the CATEGO program of the Present State Examination. They were interviewed to obtain socio-demographic details using WHO instruments for past and personal psychiatric history, as well as follow-up. All patients were followed up for a year after their inclusion in the study. Of 100 patients, 38 were white, 38 African-Caribbean and 24 Asians.

The inception rates of schizophrenia were 14.7/100,000 for African-Caribbean males between the ages of 18 and 29 years, compared with 7.5/100,000 for whites and 2.6/100,000 for Asians. Among females over the age of 30, Asians were nearly three times (4.6/100,000) more likely to have schizophrenia compared with whites (1.7/100,000) and African-Caribbeans (1.7/100,000). Overall rates across all ages (18-64) were 5.9/100,000 for African-Caribbeans compared with 3.0/100,000 for whites and 3.6/100,000 for Asians. African-Caribbeans were more likely to be unemployed, living alone, avoid company and be generally sad and gloomy in their reported pre-morbid personality when compared with the other two groups. Asians

were more likely to be married and lived with their families. There were no differences among the three groups in ways of seeking help although Asians were more likely to believe in religio-spiritual models. One-year follow-up showed 60% of African-Caribbeans to have had poor outcome compared with 17% of Asians and 24% of whites. Ethnicity was the single most important variable in poor outcome.

The present study highlights some of the areas for future research. Unemployment, living alone and insidious onset (making delay in help-seeking) may prove to be significant factors in the causation of schizophrenia among vulnerable individuals. Although the numbers are small in each ethnic group, some general observations can be made. These and other social factors are discussed and future research outlined.

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1. INTRODUCTION

The purpose of the present research is to describe the incidence rates of schizophrenia in three ethnic groups living in two geographical areas in London. In the light of any differences in the rates, the aim is to ascertain whether particular social factors are associated with them.

Cultural factors have been shown to be related to rates as well as outcome of various illnesses both physical and mental. Among mental illnesses inception rates of schizophrenia have been shown to be associated with factors like gender, marital status, unemployment, living alone, educational status. The outcome of schizophrenia is said to be better in developing countries although the inception rates of narrow definition schizophrenia are not markedly different. The better outcome has been associated with family support, lower expectations from ill individuals and rural settings. There have been only a handful of studies which have ascertained rates of schizophrenia across different ethnic groups who may be sharing the broader cultural milieu. This project was set up to ascertain inception rates of schizophrenia in these ethnic groups in London and study outcome at one year follow-up.

1.1 THE NATURE OF MENTAL ILLNESS

The content of people's beliefs, be they mentally healthy or ill, are affected by their own life experiences as well as the culture and society they live in. When people move from one culture to another (in itself a risk factor for mental illness), the sudden change of all three sets of factors - life experiences, culture, society - will alter the presentation of any psychological symptoms. Clinicians have always been intrigued by the universality of these symptoms especially to ascertain whether these changes produce different rates of major mental illness like schizophrenia.

The effect of social and environmental factors on the individual's mental state has been highlighted for as long as psychiatry as a discipline has existed. It has also been known that similar stresses affect individuals in different ways and their responses are often peculiar to those individuals. Although migration has been known to be followed by a "terrible perturbations" since Hippocratic times (McCann 1941) the studies of migrants to other cultures have varied in their aims and findings. Three

possible reasons explaining the high (or low) rates of mental disorders in the communities who have migrated are – whether the rates in sending countries are high or low, whether mental illness prone individuals migrate readily or whether the sociodemographic factors in immigrants in these groups influence the rates of mental illness. However, before any of these three factors can be studied, a prime step is to establish the inception rates of any mental illness in various migrant groups.

It had been suggested that psychotic conditions especially schizophrenia may be rare or even non-existent in non-western especially primitive populations (Jilek and Jilek-Aall 1970, Willkower and Prince 1974). However, subsequent researchers and clinicians working in non-western societies demonstrated that acute as well as chronic debilitating psychoses were identifiable in tribal villages (Westenmeyer 1980) hunter gatherers (Burton-Bradley 1985), remote mountainous areas (Kinzie and Bolton 1970) or isolated Pacific Islands (Wilson 1980). The WHO initiatives (discussed at length in the next chapter) confirmed these. Variations in the clinical presentation are influenced by a range of factors and may well affect inception rates especially if only admission rates are studied.

Kraepelin (1904/1968 b) posited that comparative psychiatry - the observation of mental disorders in different groups of people - would enable clinicians and researchers to study the effects on mental health of factors such as sex, age and occupational class. Comparative psychiatry, he argued, can help not only in the elucidation of the causes of mental illness but can also provide a strategy to determine how a patient's personality can influence the particular form of illness. Reliable comparisons between cultures are possible if cultural relativism is taken into account. However, comparisons of groups of people from different cultures who are living in the same geographical area allow us to make more accurate observations on similarities as well as differences in the symptom presentation and responses to therapeutic interventions.

In psychiatric practice, more than any other branch of medicine, it is difficult to delimit what is morbid and what is healthy. The sanction of the sick role and an appropriate provision of help are dictated by the health care systems available in any

particular country. Social, economic and political factors are in turn responsible for determining what kind of health care system is available and for whom. In psychiatric clinical practice, therefore, definition of normal and abnormal becomes even more important. Yet there is as much diversity in psychiatrists' viewpoints regarding the boundaries of normality (Lewis, 1972) as there is diversity in determining what are the desiderata for assigning an illness to one of the ideal types of reaction, syndrome, pattern, entity or whatever else it may be called.

Provided there is agreement about the classes in the total system, the essential stages in diagnosis are observation, interpretation and class allocation. Observation, according to Lewis (1972), is skilled selective perception. This means that there will be differences between observers and observer error. The interpretative stage is the point at which differences between psychiatrists are more likely to emerge and here subjective experiences play an important role. This aspect has been less studied than observer variation. In the final stage of class allocation, the merger of these two allows the clinician to reach a diagnosis. In order to minimise bias, omissions and subjectivity, structured interview schedules can be developed.

1.2 SCHIZOPHRENIA

Variability in the diagnosis of schizophrenia also stems from heterogeneity of the illness and its course, thereby making direct comparison across different geographical sites and different time spans less than ideal. Studying the epidemiology of first onset schizophrenia can reduce heterogeneity and enables the clinician and the researcher alike to plan services and monitor their effectiveness. The complex interplay between the illness, environmental factors in the genesis of the illness, response to treatment and long-term prognosis is not easy to unravel. Studying patients early in the course of the illness, before any treatment is instituted, can help to answer questions about the aetiology of schizophrenia as well as the relationship between general or specific symptoms and functioning. A comprehensive study of symptoms can allow the researcher to identify sub-types of schizophrenia, which may be linked with underlying neuro-anatomic and physiological mechanisms, and also develop specific and focused intervention strategies. Such studies also allow clinicians and researchers to examine unique aspects or complications of the illness. A sub-group of patients in a large number of first onset studies describing the course of schizophrenia

demonstrate a progressive nature of their illness and as a result it has been suggested that many clinical changes occur early in the illness (Bilder *et al*, 1992; Lieberman *et al*, 1992) which means that first-onset studies and inception rate studies can prove to be useful sources for this understanding. However, the patho-biology of schizophrenia needs to be studied along with social factors. Examining the two in combination gives a much better chance of predicting and understanding the complications of schizophrenia. The effect of the illness on family behaviour and vice versa can give direction to the appraisal of aetiological factors and management strategies.

1.3 RATES OF SCHIZOPHRENIA

Inception rates of any mental illness are of value in determining not only the actual or expected numbers of individuals in a particular geographical area who will suffer from that specific illness but in planning service delivery as well. The resources can be allocated appropriately, staff training carried out in order to meet the needs of the local population and appropriate services can be developed. A study of inception rates of schizophrenia especially across different cultures and ethnic groups can provide an understanding of key social factors which affect these rates. Such a study can identify key aetiological factors which contribute to different rates of schizophrenia. With two key studies of schizophrenia across cultures carried out by the World Health Organisation - the International Pilot Study of Schizophrenia (IPSS; WHO, 1979) and the Determinants of Outcome of Severe Mental Disorders (DOSMD; Jablensky *et al*, 1992) it was established that it was possible to conduct studies using criteria and instruments developed in other cultures. These studies also highlighted a variation in outcome of schizophrenia reporting that outcome of schizophrenia was much better in non-industrialised (developing) countries rather than in the Western countries. This observation thus raises the question whether these differences in outcomes are due to differing sets of symptoms or social factors including environmental factors for a mixture of the two. When individuals migrate from these cultures, it raises the question whether their rates of schizophrenia are similar or not and whether any differentials that exist can be explained by social factors and how these factors affect the outcome.

1.4 SOCIAL FACTORS AND SCHIZOPHRENIA

There has been a long tradition of linking schizophrenia and social factors especially in terms of aetiology and outcome (Faris and Dunham, 1939; Hollingshead and Redlich, 1958; Hare, 1956a, b). Various social factors have been identified in this association. These include housing, social isolation, employment, family support, etc. These factors also affect the processes of help-seeking and also the outcome which is likely to be associated with help-seeking - how soon after the onset it is obtained and what the sources of help are. These factors are also likely to affect how individuals and their carers perceive the illness and what models and beliefs they use in explaining the symptoms and behaviours attributed to their illness.

The association between social factors and schizophrenia can not be a unidirectional one. It is possible that social isolation, poor housing and unemployment contribute to the genesis of schizophrenia. On the other hand these factors could be seen as a result of the illness forming what Faris and Dunham (1939) called the social drift hypothesis. Although such an observations has been refuted by others (Hare, 1955a, b) as well as by Faris and Dunham themselves (1939) - the link needs to be considered especially with minority ethnic groups who, by virtue of migration may end up doing menial jobs or jobs no one else wants and may well be functioning below par compared to their abilities.

The aetiology of schizophrenia remains a complex and multi-factorial one (McGrath and Murray, 1995). The interaction between genetic and social factors in the aetiology of schizophrenia as well as subsequent relapses suggests a stress-diathesis model by which individuals who are vulnerable or susceptible to developing schizophrenia do so after experiencing severe psychosocial stressors. There is considerable evidence that pregnancy and birth complications are detrimental to the health of developing fetus and its neurodevelopment which suggests one form of vulnerability whereas genetic or familial vulnerability could be another form. Some of these factors can be easily tested whereas others are less likely to be achieved. The first and perhaps the most important step remains the establishment of inception rates so that any differences can then be studied to ascertain the possible causative effect.

The acceptance of the universality of schizophrenia and even the assumption of the supremacy of the biological aetiological factors does not preclude the possibility that cultural factors play an important role in the pathogenesis as well as in the symptom expression of these conditions.

1.5 AIMS

The first step in understanding the impact of social factors on the aetiology of schizophrenia is to determine accurately the inception rates of schizophrenia especially across different ethnic groups who migrated to the UK about the same time for broadly similar reasons. Thus if there were any stresses related to migration it is likely that their impact on both the groups will be broadly similar. Thus if migration was a key factor in aetiology the rates among the minority ethnic groups who constitute up to 6% of the total UK population (OPCS County Monitor 1992), will be broadly similar.

The key aims of this study are firstly to establish inception rates of identified cases of schizophrenia in three ethnic groups and to describe various social, cultural and clinical variables associated with the onset of schizophrenia. The pathways to care and other social factors are to be investigated to determine whether these factors play any role in the inception and outcome of schizophrenia in different ethnic groups.

If there were differences in rates between African-Caribbeans and Asians in the UK then various aetiological factors ought to be considered. If the inception rates of schizophrenia in the Caribbean and Indian sub-continent are lower than the rates reported from the UK the genetic factors are less likely to explain this differential. If the rates of schizophrenia in the Asians and African-Caribbeans are similar but different from the white population the impact of social factors in aetiology can be studied. Thus establishing the basic inception rates becomes the first important step especially when these rates are determined across a broader set of facilities from where individuals seek help rather than only hospital-based data collection.

Thus the two primary hypotheses are formulated that inception rates of schizophrenia will be higher among African-Caribbeans compared with whites and Asians as the

already existing data suggest and second that on the same basis the rates will be lower among Asians when compared with the two groups - whites and African-Caribbeans. In addition the presence of factors like housing, unemployment, sex and marital status will be described. These factors are likely to be correlated with good outcome. The symptoms profiles of schizophrenia are also likely to be different as cultures affect the presentation of symptoms.

2. LITERATURE REVIEW

The impact of social factors on the rates of schizophrenia has been described elsewhere (see Jablensky 1995). As the key aim of the present study is to ascertain the inception rates of schizophrenia across three ethnic groups the literature review covers studies which have reported on inception rates across different cultures, different centres in the same country as well as outcome studies. Since the rates are being reported from three different ethnic groups, definitions of these groups and pertinent critique of these definitions especially those of race, culture and ethnicity are discussed. First episode studies are discussed in relation to their importance but also the shortcomings especially in providing adequate numbers. As social factors are being described, an overview of various social factors such as housing, employment, is provided. Pathways into care and symptom differences across various cultural groups are highlighted later in this chapter. In each section, the findings attributed to each of the three ethnic groups are discussed separately. As the aim here is not to study the impact of migration, the role of migration on genesis of schizophrenia is not described at length.

2.1 SCHIZOPHRENIA

In 1893, Kraepelin distinguished a clinical condition as dementia praecox. He observed that in such an illness, the individual has a "peculiar and fundamental want of any *strong feeling of the impressions of life*, with unimpaired ability to understand and to remember". In addition, brooding, weakness of judgement and flightiness, mental and emotional infirmity, silly vacant laugh, making faces, and senseless playing with syllables and words may be present. Dementia praecox begins with a state of depression and the patient demonstrates *flexibility cerea* (waxy flexibility) or catalepsy and echopraxis. Automatic obedience, vivid hallucinations or confused delusions are also seen - the latter two may form the prelude to dementia praecox (Kraepelin, 1904/1968a). Kraepelin (1904/1968b) emphasises that the same fundamental symptoms of emotional dullness, absence of independent impulses of the will and increased susceptibility of the will to influence are to be found in this illness.

Bleuler (1911) first used the term "schizophrenia" to build on Kraepelin's formulation and emphasised more than Kraepelin had done that follow-up always revealed "some

significant residual symptoms common to all". The advantage of the new descriptive term over the old are many. It has an adjectival form and does not carry an implication of invariable early onset and inevitable deterioration. In addition, "schizophrenia" covered all Kraepelin's sub-classes, with the addition of paraphrenia. Moreover, Bleuler put forward the view that all the clinical manifestations of schizophrenia could be interpreted in terms of two of Kraepelin's symptoms - emotional flattening and thought disorder (loosening of associations). The other symptoms such as delusions or hallucinations could be seen as secondary or accessory to the more fundamental ones and could occur in many other types of mental disorder. Bleuler used the term "autism" to describe a turning away from the external environment into a private world of fantasy which resulted from the combination of the two fundamental symptoms. Bleuler thus considerably widened the boundaries of Kraepelin's concept (Wing, 1978).

Schneider (1957/1968) took the concept of diagnosis of schizophrenia one step further by proposing that some symptoms present all the time should be seen as basic, first rank or primary symptoms, whereas others may be seen as secondary or second rank. In the absence of epilepsy, intoxication or other evidence of gross cerebral damage, first rank symptoms were more likely to be seen as diagnostic of schizophrenia. Yet, he argued that first rank symptoms need not always be present in schizophrenia and second rank symptoms and expressive phenomena (*Ausdruckserscheinungen*) may well justify this diagnosis by virtue of their accumulation and combination. Schneider's main concern appears to be a clearer distinction between manic-depressive disorders and schizophrenia. Unlike Kraepelin and Bleuler, he did not talk about the poor prognosis of schizophrenia.

Kraepelin, while establishing comparative psychiatry, had observed the symptoms of dementia praecox in Java. However, he decided that manic-depressive insanity was less common in the native population. He did go on to acknowledge that these differences could be due to personal disposition in determining the particular form of a mental disorder. Of the numerous forms of dementia praecox, those seen in Java were less florid (especially auditory hallucinations), less distinctively marked and these illnesses were less likely to be progressive (Kraepelin, 1904/1968b).

In clinical psychiatric interviews, as Kraepelin suggests, psychiatrists can bring their own disposition, training and expertise to bear on diagnosis. In order to overcome these individual variations, Wing *et al* (1974) developed a standardised clinical interview (Present State Examination (PSE)) with a glossary of definitions of signs and symptoms as well as a semi-standardised line of enquiry. In the process of development and validation, the PSE was used in two key studies. The first of these was the US-UK Diagnostic Project (Cooper *et al*, 1972), the second the International Pilot Study of Schizophrenia (IPSS) (WHO, 1973). The findings and their implications are discussed at length later in this chapter.

The PSE consists of a series of stipulated questions which cover the main areas of psychiatric symptoms. Each question, in the form of a probe, has to be asked in its written form but subsequent probes can be modified to elicit psychopathology. Each symptom has a standard definition in the glossary. Such an approach avoids a number of problems in the ascertainment of psychiatric phenomena. The data are then analysed using a computer program, CATEGO, which can be used to generate syndromes (collection of symptoms) and to assign the patient to a diagnostic class. As will become clear later, the PSE relies very heavily on Schneider's first rank symptoms, which are said to be highly discriminatory of schizophrenia even though these symptoms do not have an empirical rationale. There are methodological problems with this approach which assumes that all cultures and communities will have the same types of illness as well as similar diagnostic rationale. In addition such assessments impose a world view on cultures where it may well not fit in easily.

Thus historically the concept of schizophrenia has evolved leading to a clearer operationalised criteria for diagnosis as well as measurement. Even though some of the earlier studies had used broader definitions of schizophrenia especially in the USA the universal nature of some symptoms of schizophrenia needs to be borne in mind.

In the next section, some key epidemiological studies are highlighted. These studies although providing prevalence and incidence rates have often been marred by poor definitions and unstandardised interviews whilst making clinical diagnoses.

2.2 EPIDEMIOLOGY OF SCHIZOPHRENIA

Bearing in mind the historical development of the definitions of schizophrenia and its symptoms, some caveats must be observed while interpreting the epidemiological data on schizophrenia. Not all studies have used the same definitions for the illness. Whereas dementia praecox had been seen as a collection of habit patterns along with exaggeration of normal behaviours in response to continuing environmental stresses and the prognosis was seen as poor, schizophrenia has been seen as a psychosis even though not every patient with schizophrenia is overtly psychotic at every stage of the disease. One of the main reasons for the discrepancies in incidence rates of schizophrenia is this wide variation in definitions, with the emphasis sometimes on symptoms alone and at other times on symptoms linked with prognosis.

In measuring the prevalence and incidence rates of schizophrenia, effective and accurate case definition and detection are only as important as getting an accurate estimate of the denominator (of the base population at risk). As discussed above, case detection is fraught with difficulties. Whether cases recorded by psychiatric services can give true incidence rates is debatable because some individuals may never come in contact with services. Such contact is obviously dependent on a number of factors, but especially the accessibility and availability of services. The explanatory models of illness as well as their health belief models used by patients and their relatives are key factors in determining the time and place of help-seeking.

Epidemiology is the study of the distribution of disorders in defined populations which are studied in terms of age, sex, geographical location etc. Such an approach avoids the problems associated with using psychiatric services as an end-point for epidemiological data collection. Community surveys obtain more accurate figures for incidence and prevalence studies.

2.3 EARLY STUDIES

Before proceeding to review studies of incidence and prevalence rates, a note of caution is necessary, especially with regard to older studies. Not only is the definition of schizophrenia unclear, but these studies often present rates without identifying whether they refer to incidence or prevalence.

Two earlier studies, by Bööck (1953) and Eaton and Weil (1955), are worth mentioning. Eaton and Weil (1955) studied an Anabaptist sect in the USA (the Hutterites, a closely knit farming community) and reported that among 8,500 subjects, 6 in every 1,000 suffered from a psychosis. These rates were not very different from those reported from other countries but most of these cases were depression, and schizophrenia was rare. Once again, the case detection and case identification and lack of an accurate account of the movement of subjects from the communities (thereby affecting the denominator) make these findings only tentative. Bööck's work in northern Sweden showed a different picture. Using several case finding approaches and making the diagnoses himself, he reported that the incidence of functional psychoses was three times higher than among the Hutterites and schizophrenia accounted for 85% of cases of psychosis, whereas manic-depressive disorder was almost non-existent.

Early studies reported that the rates of schizophrenia were much higher in the American than the British populations, while depression was much commoner in British women (Wing L *et al*, 1967; Wing and Bransby, 1970). Kramer (1963, 1969), using age-adjusted first admission rates to mental hospitals, reported figures of 24.7 per 100,000 in the USA compared with 17.4 per 100,000 in England and Wales. Rates for major affective psychoses were 11.0 and 38.5, respectively. The differences observed led researchers to plan and conduct comparative studies in the UK and the USA. Using a semi-standardised diagnostic interview the researchers reported that hospital psychiatrists in the USA made diagnoses of schizophrenia more frequently and of affective disorders less frequently (Cooper *et al*, 1972; Gurland *et al*, 1970; Kendell *et al*, 1971).

Before discussing the observations from this study in detail, it will be important to highlight some previous studies which influenced the planning of the US-UK project. Katz *et al* (1969) showed one short cine film of psychiatric interviews to audiences of psychiatrists. High rates of "apathy" were used for the diagnosis of schizophrenia and yet this was also the observation for which the audiences showed the most variation. American psychiatrists had a significantly lower threshold for the perception of abnormal behaviour and symptoms than their British counterparts. Sandifer *et al*

(1968,1969) confirmed this finding in another study when 23 American patients were evaluated by 8 British and 33 American psychiatrists. They found that American psychiatrists reported almost twice as many symptoms as the British. Pasamanick *et al* (1959) reported on a cohort of 538 female patients admitted to the wards of a teaching hospital. One of the three psychiatrists diagnosed schizophrenia in 66% of admitted patients compared with 22% and 29% by the other two psychiatrists. Similarly, 'character disorders' were diagnosed in 57% by one psychiatrist and 47% and 15% by the other two. Thus a picture of varying diagnostic patterns began to emerge.

2.3.1 THE US-UK PROJECT

Following on from the observations above, the project was established to study the relationship between mental hospital admission statistics and diagnoses by using a standardised method of assessment and diagnosis. In the subsequent phase the data for comparison were collected from nine hospitals in New York and nine in London.

A hospital setting was chosen to allow direct study of the diagnostic returns from the official admission statistics. A consecutive series of first and re-admissions were used and hospital diagnoses were compared with independent diagnoses. These data were collected by two halves of the same team in New York and Netherne Hospital in London. The seventh edition of the PSE (Wing J.*et al*, 1967) was chosen because by allowing the interviewer to vary the form of words used and to question the patient in detail making it easier to establish the presence or absence of crucial symptoms. It should be noted that 197 items from the MSS (Mental Status Schedule) (Spitzer *et al*, 1964) were also included. Nomenclature from the International Classification of Diseases (ICD-8) was used. The psychiatrist who administered the mental state interview made a provisional diagnosis after the interview and replaced this with the final diagnosis after interviewing relatives and others. Although no formal study of the inter-rater reliability of the diagnoses made by the research psychiatrists was carried out, reliability was measured indirectly in many ways.

Netherne Hospital on the outskirts of London had 1,860 beds and 1,500 admissions per year. Brooklyn State Hospital in New York had 2,600 beds with 2,000 admissions per year. Although there were clear ethnic and economic differences across the two

areas the project was concerned with comparative diagnoses and not with prevalence rates of various illnesses. A series of 250 admissions was seen at each hospital to ensure sufficient numbers for differences of practical importance to achieve statistical significance. Interviewing was carried out in two stages.

In the Brooklyn sample 18% were non-white and, even among the whites, Italians and Irish along with Puerto Ricans were common ethnic groups. The Brooklyn sample was also significantly more likely to have Jewish or Catholic patients whereas Netherne patients were more likely to be Protestant. The Netherne sample was significantly more likely to be from social classes I, II or IV and more likely to have left school before the age of 15. In this sample patients were more likely to be married and significantly less likely to be divorced, separated or widowed. They were also significantly more likely to be full-time wage earners and living with spouse, parents or friends and much less likely to be living alone when compared with the New York sample.

The project diagnoses of schizophrenia in the two centres was broadly similar - 32.4% in Brooklyn and 26.0% in Netherne. These included all sub-classifications of schizophrenia. Yet the hospital diagnoses of schizophrenia in New York was 65.2% compared with 34.0% in Netherne - a highly significant statistical difference. Other diagnoses too had similar differences but the aim here is to focus on schizophrenia. When the project and the hospital diagnoses were compared, less than half those diagnosed as having schizophrenia by the hospital staff were regarded as schizophrenic by the project psychiatrists, but, on the other hand, almost all those diagnosed as schizophrenic by the project psychiatrists received the same diagnosis from the hospital.

Some further observations need comment. Interestingly the New York patients were more likely to give ambiguous replies in the PSE. Although ambiguous replies are not uncommon in patients with schizophrenia this difference was highly significant and the authors suggest that possibly the most important cause is the relatively high proportion of New York patients who were first-generation immigrants with an imperfect command of English, even though interpreters were used for Spanish-

speaking immigrants from Puerto Rico and Latin America, this group showed more ambiguity. Furthermore, no one in the whole New York sample was New York born or even native-born American. Incomprehensibility of speech and irritability were common in the New York sample, as were loss of insight, feelings of being accused by others, something strange going on and being bothered by a particular person. Behavioural ratings showed statistically significant differences between the New York and the Netherne patients, the former were much more likely to have unkempt appearance, blunting of affect, expressionless face, complete apathy and little spontaneous speech. In the Netherne sample, on the other hand, symptoms of worrying, loss of self-confidence, suicidal thought or attempts, poor concentration and muddled thinking were highly significantly more likely.

The Netherne sample included more white collar workers and more patients had steady employment and social support; these differences may simply reflect social and cultural factors. For example, failure to finish college is common in the US for financial or educational reasons. In the UK such dropping out is less common and is often of psychiatric significance. The fact that there were more compulsory admissions in New York and more admissions for chronic handicap reflects clear social and cultural differences.

Cooper *et al* (1972) concluded that the most important observation to emerge from the comparison between the two centres was the difference between the two sets of hospital diagnoses, which was largely due to the differences in the diagnostic criteria used in clinical practice at the two hospitals and only in part due to genuine differences in the symptoms of patients themselves. For the key diagnosis of schizophrenia the difference was almost eliminated once uniform diagnostic criteria were employed. After excluding patients with alcoholism, drug dependence and organic psychoses, schizophrenia formed 37% of the hospital diagnoses of functional psychoses at Netherne compared with 78% in New York patients and the contrast in the younger patients was even greater - 35% and 84%, respectively. These differences, as noted above, were not seen in the project diagnoses.

The second phase of the project included comparisons across the two centres but using random samples from various psychiatric hospitals. In New York, all nine psychiatric hospitals were included and the required number of patients for each hospital were picked randomly from all admissions in the appropriate age range over a 7-day period. Out of 22 hospitals in London, 4 were excluded because they served a lower proportion of the population from the geographical area of Greater London; using geographical stratification, nine hospitals were chosen. Using the same interview procedures, 192 patients in New York and 174 in London were selected. The London sample had a higher proportion of Caucasian, Indian and Mediterranean patients and 29% were born outside the UK compared with 17% from outside the USA in the American sample. In the London sample, subjects were more likely to have migrated after age 16-27% compared with 12% in the US sample. The London sample were again much more likely to be married and far less likely to have been married more than once, divorced or separated.

The project diagnosis of schizophrenia remained broadly similar in the two centres whereas the diagnosis of affective disorders was much higher in the London centres. The New York sample showed significantly higher frequencies of irritability, anger or overt hostility and idiosyncratic usage of ordinary words. The New York patients once again demonstrated unclear or inadequate description of symptoms, denial of ordinary worries, deliberately misleading answers and unconvincing denial of symptoms. Several sections of the PSE which have implications for schizophrenia, such as loss of insight, motor or postural abnormalities, auditory hallucinations, non-social speech, restriction of speech, verbal mannerisms and incomprehensibility were scored higher in the New York sample although these differences did not reach statistically significant levels. There was a suggestion that the New York sample was more likely to have had a longer period of onset and to have developed serious symptoms at an earlier age and to have remained incapacitated by them.

Although the proportion of patients with schizophrenia were broadly similar in the project diagnosis, the London sample was far more likely to have symptoms of acute rather than chronic schizophrenia as well as affective components. The London sample was nearly twice as likely to have delusions of persecution and reference and

nearly four times as likely to have religious delusions. They were three times more likely to have visual and other hallucinations. They had a predominance of a delusional belief in an organisation which far from being malign was seen as actually helping them in some way. The authors proposed that this may reflect different cultural attitudes to organisations, especially if the concept of authority is coloured by the benevolent role of the state.

When diagnoses reached by a computerised diagnostic program were compared across two centres it became clear that project psychiatrists were using a rather broader concept of schizophrenia in London, yet the overall diagnosis of schizophrenia was not dissimilar when the diagnoses made by the project psychiatrists were compared. The differences between the hospital diagnoses of the New York and London sample were very prominent, with twice as many cases of schizophrenia in New York, but these differences disappeared when hospital diagnoses were replaced by project diagnoses.

The researchers suggested that the New York staff may have been ignoring the traditional symptomatic and prognostic implications of a diagnosis of schizophrenia and using the term so freely so that it became synonymous with functional mental illness. Gurland *et al* (1970) demonstrated this finding by comparing patient symptom profiles with the diagnoses and reported that among the London patients there was a clear relationship between the two, whereas in New York there was no relationship between them, largely because the majority of patients were diagnosed as schizophrenic regardless of their symptoms.

Although every effort had been made to operationalize the criteria for diagnosis it is possible that some inter-rater variability may well have affected the ratings. It is also likely that cultural factors in the formation and presentation of symptoms were much stronger and would have affected the rates of illnesses. Unfortunately these were not studied hence it is difficult to untangle their impact. This was an ideal opportunity to study symptoms and outcome but the major focus appeared to be on universalising the diagnosis. In spite of these shortcomings this remains a pioneering study in the field of psychiatric epidemiology.

The third key step in the strategy of the project was to study the psychiatrists rather than the patients. For this purpose videotapes were made of diagnostic interviews, each lasting between 20 and 50 minutes, with eight patients-five of them English and three American. These covered a wide range of symptoms. The tapes were shown to nearly 700 psychiatrists in two countries. For the three patients whose symptoms were fairly typical of their illness, there was substantial agreement between American and British raters, at least for the major category of illness involved. For three other patients with a mixture of schizophrenic and affective symptoms a majority of both American and British psychiatrists diagnosed schizophrenia but for all three a substantial minority of British raters (20-34%) diagnosed an affective psychosis instead. For the remaining two patients there was serious disagreement, with most British raters diagnosing either a personality disorder or a neurotic illness but the majority of Americans diagnosing schizophrenia. Seven of the eight patients were regarded as schizophrenics by two-thirds of the American raters, who were also much more likely to perceive more pathology than the British psychiatrists (Kendell *et al*, 1971). Both this and the hospital admission study suggest that the concept of schizophrenia held by psychiatrists in the USA was much broader than that held by British psychiatrists.

Cooper *et al* (1972) pointed out that if two groups of psychiatrists habitually disagree about whether patients of a particular kind do or do not have schizophrenia, all that can be said is that they are using the term in different ways. Although the concept of schizophrenia in New York at that time was shown to be broader than the British, there is some evidence to suggest that even the New York criteria for diagnosing schizophrenia were much broader than in other parts of the USA (Sandifer *et al*, 1968; Katz *et al*, 1969). The diagnosis of schizophrenia remains a clinical one and the defining characteristic is its syndrome. The decision whether or not an individual patient has schizophrenia can be made only by the 'Hippocratic procedure' of comparing the patient's symptoms with those of the illness and deciding whether the resemblance is adequate (Scadding, 1967).

The individual variations in the diagnosis of schizophrenia make a strong case for operationalising criteria for research. Operational criteria make research samples much more homogeneous, which then allows comparisons of socio-demographic factors, especially if the diagnosis is the starting point.

Although the US-UK project did not look at prevalence, it was a pioneering attempt to make comparisons of diagnosis across cultures and an impressive fore-runner of other international studies under the aegis of World Health Organisation. Although there were clear differences in ethnic distribution in the two centres, the authors did not draw any conclusions regarding presentation of symptoms and understanding of these symptoms by the psychiatrists.

2.3.2 INTERNATIONAL PILOT STUDY OF SCHIZOPHRENIA (IPSS) (WHO 1973)

The next key study of the epidemiology of schizophrenia, especially across cultures and nations, was that undertaken by the World Health Organisation (WHO) when it decided to set up an International Pilot Study of Schizophrenia (IPSS) (WHO, 1973). The aim was to establish whether a more detailed study of the symptoms and socio-cultural factors associated with schizophrenia could be carried out. The second purpose was to ascertain whether instruments for assessment could be used across cultures. These aims were formulated as following questions:

- a. In what sense can it be said that schizophrenic disorders exist in different parts of the world and whether they do differ in form or content and in their course?
- b. Can other functional psychoses also be recognised and do they run a recognisably different course?
- c. Can techniques be developed for recording and classifying symptomatology reliably?
- d. Can teams of research workers be trained to use these techniques so that comparable observations can be made in both developed and developing countries?

(WHO, 1973:4)

The factors favouring the choice of schizophrenia as the first subject for study was that there were at least some common features in the illness and that follow-up might

give a clue to prevalence rates and social implications of management. Thus research centres needed to be established in cities with reasonably well-developed psychiatric services.

The basic design of the study was that of a prospective follow-up study with cases selected by a series of screening procedures and examined with standard instruments. The study involved a preparatory phase followed by actual study and follow-up phases.

Nine centres around the world were chosen on the basis of an adequate existing network of services to detect a substantial proportion of the likely cases of schizophrenia occurring in the population at risk. Well-trained staff, availability of good census data and relative stability of the population were additional factors in the selection of centres. The centres chosen were: Aarhus, Agra, Cali, Ibadan, London, Moscow, Taipei, Washington DC and Prague.

The seventh edition of the PSE (Wing *et al*, 1967) was translated into eight languages and back-translated to check the accuracy of the translation. Trial examinations were carried out with 26 patients in each centre and the final version of the instruments were agreed after this data collection.

In the main phase of the study, a demographic screen and a psychosis screen were used. The screens were designed to select patients between the ages of 15 and 44 who were more likely to be available for follow-up for two years from the time of their initial evaluation and had been living in the catchment area for at least six months.

The study protocol provided a detailed evaluation of each patient included in the study and follow-up evaluation at one and two years. The follow-up findings are discussed at length later in this chapter (section 2.9). The data collection was carried out over one calendar year.

Exclusion categories were chosen to screen out both chronic patients and those whose condition may have been caused or significantly influenced by an organic factor. As

diagnostic practices vary across nations and cultures, the inclusion categories were symptoms rather than diagnostic labels. Inclusion categories were divided into those whose presence automatically qualified the patient for inclusion, regardless of severity, and those that were considered as a basis for inclusion only if present in a severe degree. The first group consisted of delusions, hallucinations, gross psychomotor disorder and definitely inappropriate and unusual behaviour. The second group consisted of social withdrawal, disorders of thinking other than delusions, overwhelming fear, disorders of affect, self-neglect and depersonalisation. However, provisions were made to allow the local psychiatrists to include patients who they felt were definitely psychotic even if they did not demonstrate one of the inclusion symptoms, thereby broadening the inclusion criteria thereby making cross-cultural comparisons of symptoms more problematic.

In all, 1,202 patients formed the study population from the nine centres. Of these, 811 had a centre diagnosis of schizophrenia (made by the local research psychiatrist). In addition to PSE, socio-demographic details and information on history of mental illness, previous treatment, pre-morbid personality and social functioning were gathered. This instrument too was translated into appropriate languages, although there were some difficulties in making cross-cultural comparisons.

The sample comprised 552 men and 650 women (male:female ratio=1:1.17); 444 males and 437 females were below the age of 34. Of the total, 544 (45%) were single and 260 (22%) were married; in Agra 79% were married while London had the lowest proportion of patients who were married (24%). These figures include stable relationships and cover all diagnoses. Moscow had the least proportion of patients (7.1%) with above average or severe degree of social isolation and London the highest (60.6%).

Among the 811 schizophrenic patients, the largest single diagnostic group was paranoid schizophrenia, comprising 323 patients, which accounted for 75% of schizophrenic patients in London, 53% in Aarhus and Washington DC and 40% or more in Ibadan and Taipei. The second commonest diagnosis was schizo-affective schizophrenia, which was strongly represented in Agra, Prague and Ibadan.

Psychopathology of the main diagnostic groups within the field research centres showed some interesting variations. The rank order of symptoms was broadly similar for all schizophrenic patients within each centre. The schizophrenic groups of all centres had a very high score on lack of insight, pre-delusional signs (such as delusional mood, ideas of reference, perplexity), flatness of affect, auditory hallucinations (except Washington DC) and delusions of control. Centre scores were also high on delusions, derealisation and disturbances of mood, although these were not uniformly high. Scores were relatively low across centres in the areas of qualitative psychomotor disorder (negativism, compliance, mannerisms and similar abnormal behaviour), pseudo-hallucinations and affective changes other than incongruous affect.

Similar analysis of the paranoid schizophrenia subgroup (with 323 patients) showed that lack of insight, experiences of control, pre-delusional signs, delusions and flatness of affect occurred in descending order of frequency. High ratings were obtained on auditory and "characteristic" hallucinations (such as voices discussing the patient and hallucinations from the body), although these ratings were lower in Washington DC than in other research centres. All centres gave low scores on psycho-motor disorders and disorders of form of thinking, all except London and Moscow rated low on pseudo-hallucinations, and all but Washington DC had low scores on affective changes other than incongruity of affect. Across all centres in this group, lack of insight, ideas of reference, unwillingness to co-operate, inadequate descriptions of problems, delusions of mood, flatness of affect and presence of auditory hallucinations were found.

Using the computer program CATEGO for the PSE, (it is an algorithm which summates symptoms into clusters of syndromes to assign diagnostic classes), there was 87% agreement between the diagnosis of schizophrenia, mania or depression made by the centre psychiatrist and the computer diagnosis.

Using CATEGO, clinical diagnosis and cluster analysis, researchers described a concordant group of schizophrenics. When this group was examined in detail the following psycho-pathological characteristics were noted: 97% of patients had lack of

insight, 74% had auditory hallucinations, 70% had verbal hallucinations, 70% ideas of reference, 67% delusions of reference, 66% suspiciousness, 66% flatness of affect, 65% voices speaking to the patient, 64% delusional mood, 64% delusions of persecution, 64% inadequate description, 52% thought alienation and 50% thoughts spoken aloud. Next common symptoms were delusions of control (48%), hearing voices speak complete sentences (44%) and poor rapport (43%) came close. The concordant schizophrenics scored much higher on delusions, hallucinations and flatness of affect while discrepant schizophrenics scored higher on depressive symptoms.

While aware of the possible criticisms from anthropologists that transcultural studies cannot be conducted effectively because differences in diagnostic patterns are irreconcilable (for further discussion see section 2.34 later in this chapter), the researchers felt optimistic that with a relatively small amount of training, psychiatrists from nine countries could examine patients in a standardised manner for research purposes and find similar groups of schizophrenics in all these countries.

In spite of these criticisms it was the first cross-cultural study using standardised assessment techniques to indicate an effect of culture on the course of schizophrenic disorders. However, as it was not an epidemiological study in the strictest sense, the patients selected could not necessarily be considered representative of the range of syndromes and conditions that might meet specified criteria for a diagnosis of schizophrenia in different cultural settings.

2.3.3 DETERMINANTS OF OUTCOME OF SEVERE MENTAL DISORDERS

The next step in the cross-national study of the epidemiology of schizophrenia was the Determinants of Outcome of Severe Mental Disorders Study (DOSMD) (Jablensky *et al*, 1992). The lessons of the IPSS were taken on board and a full detailed study was mounted in 11 sites in 9 countries. In view of the great potential significance of the conclusions of the IPSS, a need was felt for a more focused investigation of the frequency and 'natural history' of schizophrenia and related disorders, which would be based on more representative patient populations in different cultures.

In most of the previous studies, the difficulty of developing an adequate case-finding method for a condition of low population incidence, such as schizophrenia, had been compounded by a lack of specific diagnostic criteria and of the standardised methods for collecting data on history and psychopathology (Jablensky *et al*, 1992). Hence a multi-centre collaboration was indicated, and using the same methods and instruments; common diagnostic criteria and comparable case-finding procedures would simultaneously be applied across culturally different catchment areas. A special aim of the project was to link the epidemiological estimation of incidence rates to a diagnostic and psycho-pathological classification of the cases.

The study was designed to tackle the secondary objective of integrating life events and "Expressed Emotion" concepts into its design or the discrepancies in the way psychotic illness is perceived and interpreted by clinicians and the patients' families. These were seen as possibly influencing the prognosis by affecting compliance with treatment and the emphasis was on covering a broad range of hypotheses and subjects. Of the 12 field research centres - Aarhus, Agra, Chandigarh, Cali, Dublin, Honolulu, Rochester, Ibadan, Moscow, Nagasaki, Nottingham and Prague - six had been involved in the IPSS. The aims of the 'core' study (epidemiological aspects including prospective case- finding, clinical, diagnostic and social assessments) included one- and two-year follow-up. Chandigarh in North India was the only field centre with two catchment areas - one urban and one rural. The inclusion and exclusion criteria are shown in Appendix II. The variations in the demography, social organisation and geographic characteristics of the catchment areas along with differing patterns of health care and utilisation of various helping agencies by the population led to a non-uniform pattern of data collection with a degree of uncertainty as to the completeness of the coverage. Five centres had to employ some pre-screening selection, had breaks of continuity of case-finding or excluded from monitoring some of the known or presumed contact sites.

Clinical and diagnostic assessment used the ninth edition of the PSE (Wing *et al*, 1974) or the Syndrome Check List (SCL) (which is derived from the PSE but can be used to collect relevant information from the case notes). A new instrument - the Psychiatric and Personal History Schedule (PPHS) - was used to collect detailed

information on the mode of onset, early manifestations of the illness, medical and psychiatric history, the family background, social functioning and circumstances, and the development of the pre-morbid personality in a standardised manner. In addition, diagnosis (based on a consensus between two or more investigators) was ascertained.

The case finding extended over two years and 1,538 patients passed the initial screen but 156 were subsequently excluded - a majority of them for diagnostic reasons. Mostly these were patients with affective disorders who also had psychotic symptoms. Some cases were excluded because they had either sought help previously for their symptoms or the date of screening fell outside the agreed period. Thus the final sample was 1,379. In addition, 400 cases were estimated to have "leaked" from the study centres - the largest number (257) being from Prague, followed by Agra (over 100). Nottingham had 4 patients who were missed. Thus the incidence rates reported should be seen as approximate rather than true rates.

Of the 1,379 subjects, 745 were male and the rest female (the age-sex specific ratios are described below). If urban areas are defined to include suburbs and peri-urban conurbation, the percentage of patients living in the urban communities was 68% in Agra and 100% in Moscow. The rural centre in Chandigarh yielded 98% rural subjects. In this and the Ibadan site, more than 50% of subjects were reported as living in socio-economically deprived localities. Below average socio-economic level of neighbourhood was also rated for 46% of patients in Nottingham, 33% in Rochester, 28% in Agra and 26% in urban Chandigarh. Honolulu, on the other hand, was the only centre with 19% of its patients resident in affluent, above average residential communities. A lower proportion of females (39%) were single compared to males (68%). In rural Chandigarh and Ibadan, a joint family or the extended family was a more frequent type of social unit than the nuclear family. The proportion of patients living alone was nil in Agra and rural Chandigarh, and 6% in Dublin, rising to 35.4% in Aarhus. The proportion of illiterate subjects (with no education at all) was 50%, 40% and 30% in rural Chandigarh, Agra and Ibadan, respectively. In Moscow, urban Chandigarh, Prague and Honolulu, 23%, 15%, 11% and 10% of patients respectively were university graduates. Overall, 25% of the patients had never had

gainful employment for various reasons. The remainder had some work record and this proportion varied from 43% in Chandigarh to 97% in Honolulu and Moscow.

In Agra 71% of patients had sudden precipitous onset and another 12% acute, whereas in 15% it was insidious and was unknown for the remainder (sudden onset was defined as florid onset within one week but no prodromal symptoms - if these were present the onset was defined as precipitous). The proportion of acute and gradual/insidious types were higher in the developing countries and the reverse in developed countries. However, when patients in developing and developed countries were compared according to the length of illness before intake into the study, no significant differences emerged.

The ten most common early clinical manifestations of the illness were loss of appetite, sleep or libido; neglect of usual activities and interests; feeling persecuted, harmed or bewitched; avoiding other people; feeling frightened or anxious; behaving as if hearing voices; claiming impossible things; irritable and angry without reason; looking sad, mournful or hopeless and talking incomprehensibly. As the questions were framed in layman's terms and the relatives were also asked to give information, these responses indicate ways in which psychotic illnesses present themselves to local lay observers in the immediate social environment of the patients. Interestingly, negative manifestations were seen as more important. In spite of the cultural differences there were a great deal of similarities and no clear trends seemed to emerge.

One of the key methods of arriving at the diagnosis was the application of the CATEGO diagnostic program, although Wing *et al* (1974) do not recommend a straightforward application of diagnostic labels. The CATEGO classification of cases is based solely on the symptoms or signs present during the four weeks before examination, but this was the only sample of cases of schizophrenia that was unambiguously determined. The details of CATEGO and its components are described in Section 4.3. The most frequent CATEGO sub-class was nuclear schizophrenia, except in rural Chandigarh. At the level of individual symptoms, those occurring most frequently were generally non-specific, e.g., restlessness, poor

concentration, social withdrawal or subjective feelings of nervous tension. The affective symptoms occurred with greater frequency in developed countries, as did Schneiderian first-rank symptoms, especially thought disorder (thought insertion or thought broadcast) and changed quality of the experience of reality (e.g., primary delusions) but not symptoms such as characteristic hallucinations (voices discussing the subject in the third person) or delusions of control, which were either more common in patients in developing countries or had a similar frequency in the two settings. Patients in the developing countries scored higher than those in developed countries on auditory hallucinations (other than the first rank type) and on visual hallucinations.

The 727 patients who were assigned to CATEGO class S+ had one or more out of 8 specified PSE symptoms: thought insertion, thought broadcast, thought echo, thought commentary, thought block, thought withdrawal, voices discussing the patient in the third person, delusions of control, delusions of alien forces penetrating and controlling the mind or body, and primary delusions. One-third (36%) of cases manifested no first rank symptoms, 15% manifested one symptom and diminishing proportions displayed increasing numbers of such Schneiderian symptoms. In the CATEGO S+ group of patients, 7% manifested none, 51% had one or two, 27% had three or four, 8% had five and 5% had six or more such symptoms, thereby producing a skewed bell-shaped distribution. Within the S+ group of patients, once again first rank symptoms and affective symptoms were more common in developed countries whereas patients in developing countries had higher scores on auditory and visual hallucinations.

A history of alcohol abuse in the year preceding intake was given for 57% of all the male patients. Drug abuse was described in only 14% but the problem was heavily concentrated in Honolulu (41%), Rochester (36%) and Aarhus (24%).

The method of first-in-lifetime contact is more comprehensive than the first admission method and includes non-hospital facilities and services. It does not eliminate the possibility that some cases of schizophrenia may never make contact with services, and would therefore be missed.

The one-year rates, calculated per 10,000 population at risk in all the age groups between 15 and 54, showed that the incidence CATEGO class S+ was broadly similar across sites, at around 1.0 per 10,000. The combined male and female rates varied from 0.7 in Aarhus to 1.4 in Nottingham. For males, the variation spanned 0.8 in urban Chandigarh and 1.7 in Nottingham whereas for females it was 0.5 in Aarhus and 1.4 in Moscow. The overall variation was at most two-fold and these differences were not statistically significant. By including CATEGO classes S?, P+ and P?, the incidence rates went up to around 1.5 and also increased the variation of female rates, from 0.7 in Aarhus to 2.3 in rural Chandigarh, while the variation for males and for combined sexes remained within a nearly three-fold non-significant variation.

The rates of CATEGO S+ and broad schizophrenia as collected in the DOSMD study are shown in Table 2.1. In rural Chandigarh, in the 'broad' diagnostic category there is no clear-cut gender-related pattern and no age-related peak of incidence can be identified. In the S+ group, the number of males exceeds females in all age groups up to 34. A clustering of females was noted around the age group of 40-49 which, as the authors explained, was due to a relatively small number of cases with relatively low numbers of population in the older age group. In the urban Chandigarh patient sample, on the other hand, there was an excess of males in age group 20-24 and of females in age group 35-44 in the 'broad' diagnostic group. There was a marked peak of incidence in males in the 20-24 age groups. Incidence rate data were not available for Agra and Ibadan. These two sites were excluded from the final analysis because of high rates of leakage of patients. These rates from Chandigarh cannot be compared directly with the data from the rest of India because the method of collection of data varied, as is discussed at length below.

High rates in females of Indian origin were also found by Kadri (1963) and Murphy (1968) in Singapore.

Place	Pop ⁿ base	Broad S			S +			Non S		
		Rate	n	(C.I.)	Rate	n	(C.I.)	Rate	n	(C.I.)
Aarhus	314000	1.50	47	(1.07- 1.93)	0.70	22	(0.41- 0.99)	0.80	25	(0.49- 1.11)
Chandigarh (rural)	61642	4.20	26	(2.58- 5.82)	1.10	7	(0.27- 1.93)	3.10	19	(1.71- 4.49)
Chandigarh (urban)	205768	3.50	72	(2.69- 4.31)	0.90	19	(0.49- 1.31)	2.60	54	(1.90- 3.30)
Dublin	149879	2.20	33	(1.45- 2.95)	0.90	13	(0.42- 1.38)	1.30	19	(0.72- 1.88)
Honolulu	210020	1.60	34	(1.45- 2.14)	0.90	19	(0.49- 1.31)	0.70	15	(0.34- 1.06)
Moscow	231866	2.80	65	(2.12- 3.48)	1.20	28	(0.75- 1.65)	1.60	37	(1.09- 2.11)
Nagasaki	267149	2.00	53	(1.46- 2.54)	1.00	27	(0.62- 1.38)	1.00	27	(0.62- 1.38)
Nottingham	202214	2.20	44	(1.55- 2.85)	1.40	28	(0.88- 1.92)	0.80	16	(0.41- 1.19)

Table 2.1 Incidence rates of schizophrenia from DOSMD

2.3.4 A CRITIQUE OF IPSS AND DOSMD STUDIES

Thus far, the main findings of three major international studies on diagnosis and incidence of schizophrenia have been described. However, the critics of these studies state that problems in diagnosis have been overlooked. In addition to applauding such major joint international collaborative studies, which allow large numbers of patients to be recruited and studied, a key question arises about the loss of heterogeneity of symptoms and the impact of culture and society on the development and maintenance of symptoms.

There is little doubt that the recruitment of patients is affected by the patterns patients and their relatives demonstrate in help-seeking and in keeping in contact with health care systems. Health care systems comprise personal/social, professional and folk sectors and the choice of sector depends upon a number of factors. Each health care system determines the diagnosis and the management of symptoms. It appears that

within each health care system the core function is healing per se (Kleinman, 1980). The doctor-patient interaction depends upon the expectations of each party towards the other and also on models of ill health and health care as well as previous experiences and help-seeking. Race, education, gender and socio-economic status all contribute towards the expectations of patients from doctors and vice versa. This means that when patients go to seek help for the first time, many factors are at play. By homogenising the data, individual experiences are ignored. And when these data do not fit in with the researchers' expectation they are not used - as is evinced by not using the incidence data from Agra and Ibadan in the DOSMD study even though case collection for Agra and Ibadan had been satisfactory in the IPSS data.

The second important criticism is to do with the data analysis, which focuses on the similarities rather than differences in the "broad schizophrenia".

Kleinman (1987) argues that most of the cross-cultural research done in psychiatry reveals a very strong bias of psychiatrists towards 'discovering' cross-cultural similarities and universals in mental disorders. Most of the research in the field is initiated from a wish to understand and prove similarities rather than differences. He criticises the IPSS for focusing on the core symptoms of schizophrenia, which would be clustered together in more or less the same way in Western and non-western industrialised and non-industrial societies. By applying a non-epidemiological clinic-based comparison through the use of a template of symptoms to psychotic patients in a range of societies to identify groups of patients who seemed similar, it leaves out all those who fail to fit the template - the very patients Kleinman suggests are of greater interest from a cultural perspective, simply because they are the ones who would reveal the greatest amount of cultural diversity. As will be discussed later in the section on prognosis these patients have been ignored completely by the researchers. Similarly, the DOSMD data show to Kleinman that the researchers, because of their methodological rigour, managed to get good quality data but in their interpretation ended up focusing on similarities and ignoring the differences. Having stated that the frequency of the use of the individual ICD sub-type rubric varied from 0 to 65% of the cases in the different centres (e.g., catatonia was diagnosed in 10% of cases in developing countries but in only a handful in developed countries, whereas

hebephrenia was 13% in developed countries and 4% in developing countries), they go on to conclude that 'patients with a diagnosis of schizophrenia in different populations and cultures share many features at the level of symptomatology' (Sartorius *et al*, 1986). Kleinman (1987) agrees that they are right but criticises them for choosing to de-emphasise substantial differences. Using the researchers' findings of S+ and broad cases of schizophrenia as an example, Kleinman argues that the restricted sample becomes a constructed sample as it places a template on the heterogeneous population sample and stamps out a homogeneous group of clinic cases. These differences are the key to seeing the aetiology of schizophrenia on a genetic basis.

Cohen (1992a), in a similar vein, argues that although the IPSS (WHO, 1973) set out to collect information on differences in structural elements of the cultures and distinct treatment modalities, these data are not presented. Furthermore, when studying the findings of the DOSMD study, Cohen argues that, although the case-finding method may have been more accurate, the vast majority of cases were identified in the Western type of psychiatric facility. The proportion of cases with acute onset in the developing countries was twice as high as that in developed countries and such a variation may indicate real differences in the cross-cultural manifestations of schizophrenia but, with the problems of hospital based samples and the poor state of mental health services in the third world, it seems more likely that these differences are a reflection of processes having little to do with schizophrenia.

Karno and Jenkins (1993) proposed that the better prognosis in developing countries reported in the WHO studies may well be linked with families, hence the family unit was a logical focus of greater research attention and therapeutic collaboration. They suggested kinship structure and residential patterns differ across cultures and the significance of this feature of social organisation is that persons in developing countries suffering from schizophrenia are more likely to have contact with a broad range of kin. The relatively isolated social environment of the Euro-American patient who may have few relatives is less likely to occur in non-western settings. The increased contact may well both be a source of considerable social support and add distinctive qualitative features to family settings. From their own data from Hispanic

families in the USA, these authors suggest that cultural differences in outcome are likely to be explained by family structure and interactions.

From this overview it appears that although the WHO studies were very important in placing psychiatric epidemiology on the world map they did have some serious methodological problems. A key problem with the WHO studies (especially the DOSMD) had been the missing data from Agra which showed a very high leakage rate of patients. Although the incidence rates from Agra and another centre Ibaden were omitted it still raises the questions about the quality of the rest of the data collection. Even if checks had been maintained on inter-rater reliability there is an additional problem of clinicians becoming more conscious of their diagnostic patterns thereby affecting the rates of referral to the researchers.

However, these studies highlighted two key themes – firstly that schizophrenia exists across all cultures and there are marked similarities in symptoms. Secondly that the outcome of schizophrenia varies across cultures and factors can be identified which are said to be responsible for these differences (see section 2.9). The interactions between ethnic and cultural factors add another complex dimension to aetiological and outcome factors. The definitions of ethnicity race and culture are discussed in section 2.5 in this chapter. However, it will be useful to remind the reader that culture is described as an accumulation of knowledge among people constituting a group of conceptual structures and social institutions which determine the total reality of life within which people live and die. Thus culture is applied to all features of an individual's environment but generally to non-material aspects held in common with other individuals. Ethnicity on the other hand refers to a sense of belonging and group identity determined by social factors as well as social pressures.

Hence it makes sense to compare ethnic groups in same cultural environment in order to study rates of an illness (in this case schizophrenia) and various social factors which may be associated with rates of schizophrenia. The methodological problems alluded to above mean that research needs to be carried out in the same cultural environment in order to tease out the association with social factors in aetiology and outcome of schizophrenia.

2.4 FIRST EPISODE STUDIES: A REVIEW

In this section the first episode studies dealing with schizophrenia are reviewed, with an emphasis on methods used, particularly in diagnosis.

As noted earlier, a key problem, in any research with schizophrenia is the wide variety of definitions used which are sometimes not even defined in the study. Some of this variability can be attributed to the heterogeneity of the syndromes of schizophrenia but an equally valid cause is the widely discrepant definitions used by researchers to identify their patients. The use of samples of patients who may have chronic symptoms or be at varying stages of different types of treatment makes any generalisations unwise (Keshavan and Schooler, 1992).

Utilising first admission, first episodes or early schizophrenia is an important approach to allow longitudinal studies, to gather drug-naïve subjects for neurological and pharmacological studies, detecting aetiological factors and increase understanding of substantial variability. As Keshavan and Schooler (1992) observe, two key problems in conducting research with patients early in the course of the illness are, first, that the number of incident cases is small, so amassing a reasonable sample size can either take too long or has to be done at multiple sites---producing the kind of problems that the DOSMD study has thrown up, and secondly, that the diagnosis of patients presenting for the first time is difficult and re-diagnosis at a later stage may well be needed - hence some degree of follow-up is required to determine the stability of the diagnosis.

In this section, the primary focus is on studies which highlight the criterion variance, i.e., using different definitions thereby highlighting the biological and clinical variability.

In this review, only studies where first episode samples have been described are included; although retrospective case-note studies are mentioned, their data are not as detailed as one would hope for. The data are divided into two major components - first, the basic population and aims of the study. These findings are shown in Tables

2.2-2.4 whereas Table 2.2 shows some international studies, Table 2.3 concentrates on first onset studies. However, a vast majority of these studies were carried out in the USA and were for neurological or pharmacological investigations and as is evident the numbers of patients are often very small. In addition, the same group of patients has been investigated and reported more than once in several cases. The reader's attention is drawn to the problems of inclusion and exclusion data both of which are often not very clear in this series. Studies where the sample size is less than 10 have been excluded. Before discussing the findings further, it would be helpful to reiterate the differences in prevalence and incidence rates.

2.4.1 PREVALENCE RATES

The prevalence rate of a disease is its frequency in the general population. There are many methods which can be used to establish prevalence rates. For example, case register data can be used to estimate prevalence on a given census day (point prevalence) or within a given time interval (period prevalence) or both. Field surveys can be used but, because of the time required for case finding, lend themselves more readily to estimation of period than of point prevalence. The rate results will depend upon whether the whole population or only a small defined proportion is being used to establish the denominator.

2.4.2 INCIDENCE RATES

The incidence or inception of a disease is the frequency of appearance of new cases in the general population. As the onset of schizophrenic illness is difficult to define precisely, the incidence rates are based on first contacts with psychiatric services. As is clear from Table 2.2, these rates vary widely and may well be unreliable, depending on the source of data collection. Because of uncertainties in calculating both the numerator and the denominator, estimates of incidence rates can be problematic. Numerator is the number of 'incidence' cases who have been 'diagnosed' as developing a condition in a one-year period. Such a diagnosis may be a clinical one, in or not in contact with services or frequency of new cases in the general population. Denominator is the population base (highlighting population at risk) from which the cases are taken. Denominator could be based on the total population at risk, gender, social class or age related. The studies cited in Table 2.2 offer a broad epidemiological overview over a range of nations - developed and developing - over the last sixty years. The problems with both method and interpretation persist in all

these studies. Some of the major methodological flaws are illustrated in the Table itself in that information on key factors is often missing. This Table illustrates earlier studies.

It is clear from Table 2.3 that the main aim of these studies was other than incidence rates and hence exclusion/inclusion criteria become more important in the description of these studies. However, not all studies have highlighted these and often the numbers of patients are very small. Although a large number of studies are included here, the table shows a paucity of good epidemiological data.

Table 2.4 highlights some of the first incidence studies. Several caveats need to be borne in mind here while interpreting these data. First, the sample size is sometimes small, thereby making any generalisations difficult. Secondly, a majority of these studies are biological studies, hence the interests of the researchers are focused on the biological factors rather than epidemiological factors. Thirdly, the diagnoses are made by a number of researchers using a number of differing criteria. Not all studies have used structured interviews. Fourthly, the data on age and sex distribution are provided in very few studies. Fifthly, the date of onset has not always been clear. Sixthly, the exclusion criteria are not always very clear and neither have the issues of co-morbidity, substance abuse or organic illness been tackled in all the studies. This Table illustrates different sources of data collection and other factors which beleaguer this field of research.

As Ödegaard (1952) argued, most patients with schizophrenia are admitted to hospital at some stage so that first admission statistics lag behind, but correspond roughly to, inception rates. This may, however, no longer prove true in the future, as it becomes common practice to treat acute schizophrenia without hospital admissions.

The incidence and prevalence rates have been cited as reported by their authors for reasons of historical accuracy and also drawing the reader's attention to vast variability in approaches to calculating these rates.

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Birth Cohort Studies						
Klemperer (1933)	Germany	Urban	Random birth cohort n=1,000	Incidence	No	
Fremming (1947)	Denmark	Rural	Full birth cohort n=5,500	Incidence	No	
Helgason (1964)	Iceland	Mixed	Full birth cohort n=5,400	Incidence	No	
Census & Longitudinal Studies						
Brugger (1931)	Germany	Mixed	All inhabitants n=37,561			
Brugger (1933, 1938)	Germany	Rural	All inhabitants n=8,628			
Strömgen (1938)	Denmark	Rural	All inhabitants			
Sjörge (1948)	Sweden	Rural	All inhabitants			
Larsson & Sjörgen (1954)						
Böök (1953)	Sweden	Rural	All inhabitants n=8,891			
Böök <i>et al</i> (1978)			n=5,748			
Service contacts						
Ödegaard (1946)	Norway	Whole country	First admissions n=14,231		No	Hospital diagnosis
Shepherd (1957)	England	Bucks	First and readmissions			Hospital diagnosis

Table 2.2 (page 1 of 2) Some International studies from which rates of schizophrenia have been reported

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Hollingshead & Redlich (1958)	USA	New Haven	All receiving psychiatric treatment	Census		Hospital diagnosis
Norris (1959)	England	Catchment	All admissions		N/A	Follow-up
Kadri (1959)	Singapore	University students	First admissions		Yes	Author's diagnosis
Wing <i>et al</i> (1967)	England Scotland USA	Three catchment areas	Census on one day	Census	Yes	Case register
Adelstein <i>et al</i> (1968)	England	Salford	Contact			Case register
Walsh (1969)	Ireland	Dublin	First admissions n=1,427	Follow-up		Hospital diagnosis
Murphy & Raman (1971)	Mauritius	Island	First admissions n=94	Follow-up		Hospital diagnosis
Lieberman (1974)	USSR	Moscow	All onsets			Register

Table 2.2 (page 2 of 2) Some International studies from which rates of schizophrenia have been reported

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Nielsen (1976)	Denmark	Samsø	All contacts			Hospital diagnosis
Babigian (1980)	USA	Monroe NY	First contacts			Case register
Gift <i>et al</i> (1981)	USA	n=101	First admission	Phenomen.	No	Inpatient assessment
Kane <i>et al</i> (1982)	USA	n=28	Remitted first episode	Outcome	Yes	Day patients
Nyback <i>et al</i> (1982)	USA	n=19	First admission	Biological measures	Yes	Inpatients
Weinberger <i>et al</i> (1982)	USA	n=35	First episode	Biological measures	Yes	Inpatients
Schulz <i>et al</i> (1983)	USA	n=15	Teenage schizophrenia	Biological measures	Yes	Inpatients
Sheppard <i>et al</i> (1983)	USA	n=12	First admission			Inpatients
Targum (1983)	USA	n=21	Drug naïve schizophrenia			Inpatients
Banki <i>et al</i> (1984)	USA	n=14	First admission	Biological outcome	Yes	Inpatients
Erickson <i>et al</i> (1984)	USA	n=11	First admission	Biological measures		Inpatients
Johnstone <i>et al</i> (1986, 1990)	UK	n=253	First episode	Treatment Outcome		Inpatients
Rabiner <i>et al</i> (1986)	USA	n=36	First episode	Phenom., outcome	Yes	Inpatients
				Outcome	Yes	Inpatients

Table 2.3 (page 1 of 8) First episode studies of schizophrenia



Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Schwarz <i>et al</i> (1986)	USA	n=70	First episode	Outcome	Yes	Inpatients
Turner <i>et al</i> (1986)	UK	n=30	Early schizophrenia	Biological		
Wong <i>et al</i> (1986)	USA	n=10	Drug naïve schizophrenia	Drug free		
Demisch <i>et al</i> (1987)	USA	n=12	First episode	Biological measures		
House <i>et al</i> (1987)	USA	n=68	First contact		Yes	
Makanjuola & Adedapo (1987)	Nigeria	n=34	"New cases"		No	
Scottish Schizophrenia Research Group (1987, 1988)	Scotland	n=49	First episode	Biological phenom. Treatment outcome	Yes	Inpatients
Beiser <i>et al</i> (1988)	USA	n=175	First episode	Biological phenom.	Yes	Inpatients/ Outpatients
Iacano <i>et al</i> (1988)						
Erickson <i>et al</i> (1989)						
Goldberg <i>et al</i> (1988)	USA	n=39	First admission adolescent psychosis	Biological	Yes	Inpatients
Waring <i>et al</i> (1988)	Canada	n=34	First admission	Outcome	Yes	Inpatients
Lieberman <i>et al</i> (1989)	USA	n=51	First admission	Outcome	Yes	
Jody <i>et al</i> (1990)						
Bilder <i>et al</i> (1992)						

Table 2.3 (page 2 of 8) First episode studies of schizophrenia

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Öhman and Öhlund (1989)	Sweden	n=15	First episode	Outcome		
Shepherd <i>et al</i> (1989)	UK	n=49	First admission	Outcome	Yes	Inpatients
Andreassen <i>et al</i> (1990)	USA	n=11	First admission	Biological	Yes	Inpatients
Barrelet <i>et al</i> (1990)	USA	n=51	First admission	Outcome	Yes	Inpatients
Farde <i>et al</i> (1990)	Sweden	n=18	First episode	Biological	Yes	Inpatients
Hogg <i>et al</i> (1990)	Australia	n=17	Recent onset	Phenomen.		Inpatients
Lindström <i>et al</i> (1990)	Sweden	n=24	First admission	Biological		Inpatients/ Outpatients
Martinot <i>et al</i> (1990)	France	n=12	First episode	Biological		Inpatients
Delisi <i>et al</i> (1991)	USA	n=56	First admission	Biological		Inpatients
Hoff <i>et al</i> (1992)	USA	n=11	First episode	Biological	Yes	Inpatients/ Outpatients
Pettegrew <i>et al</i> (1991)	USA	n=19	New diagnosis	Biological		Inpatients
Rubin <i>et al</i> (1991)	Denmark	n=27	First episode psychosis	Phenomen.	Yes	Inpatients
Sweeney <i>et al</i> (1991, 1992)	USA	n=250	First admission	Phenomen.	Yes	Inpatients
Haas & Sweeney (1992)	USA	n=65	First hospitalisation	Biological	Yes	Inpatients/ Outpatients
Bromet <i>et al</i> (1992)	USA	n=77	First episode	Phenomen. Biological	Yes	Inpatients
Flaum <i>et al</i> (1992)	USA					
Ganguli & Brar (1992)	USA					

Table 2.3 (page 3 of 8) First episode studies of schizophrenia

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Holsenbeck <i>et al</i> (1992)	USA	n=21	First break	Phenomen. Outcome	Yes	Inpatients
Neuchterlein <i>et al</i> (1992) Dawson <i>et al</i> (1992)	USA		First episode	Phenomen. Outcome	Yes	
Shtasel <i>et al</i> (1992)	USA	n=35	First episode	Outcome	Yes	
Tandon <i>et al</i> (1992)	USA	n=20	First episode		Yes	Inpatients
Tohen <i>et al</i> (1992)	USA	n=102	First admission	Outcome	Yes	Inpatients

Table 2.3 (page 4 of 8) First episode studies of schizophrenia

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Lieberman <i>et al</i> (1992)	USA	n=70	First episode	Examine psychobiology	Yes	Little or no drug exposure
Iacono & Heisen (1992)	USA	n=175	First episode	Sex differences	Yes	
Wehel <i>et al</i> (1992)	USA	n=70	First episode	Follow-up	No	3 year
Shtasel <i>et al</i> (1992)	USA	n=37	First episode	Study symptoms	Yes	Cluster analysis
Chengappa <i>et al</i> (1992)	USA	n=51	First episode	Handedness	Yes	Common in left handers
Koreen <i>et al</i> (1994)	USA	n=41	First episode	HVA levels	Yes	Sex differences
Hoft <i>et al</i> (1994)	USA	n=62	First episode	Corpus callosum	Yes	Sex differences
Clementz <i>et al</i> (1994)	USA	n=50	First episode	EEG studies	Yes	Sex differences
Zhang <i>et al</i> (1994)	China	n=78	First episode	Family interventions	No	Readmissions
Geddes <i>et al</i> (1994)	UK	n=44	First episode	Follow-up	Yes	Subgroup
Wada <i>et al</i> (1994)	China	n=14	First episode	EEG studies	Yes	Dysfunction across sexes

Table 2.3 (page 5 of 8) First episode studies of schizophrenia

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Diebold & Engel (1977)	Germany	n=60	First episode	Symptom -atology	Yes	Paranoid Schizophrenia
Chandrasena & Rodrigo (1979)	Sri Lanka	N=169	First episode	Symptom -atology	No	Inpatients only
Weinberger <i>et al</i> (1982)	USA	n=35	All episodes	Structural imaging	No	Vent enlargement
Rajkumar & Thara (1989)	India	n=60	First episode	Follow-up	No	Relapses
Bogerts <i>et al</i> (1990)	USA	n=35	First episode	Structural	Yes	Abnormal findings
Grawe <i>et al</i> (1991)	Norway	n=49	First episode	Symptoms	No	First admissions

Table 2.3 (page 6 of 8) First episode studies of schizophrenia

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Vazquez-Barquero <i>et al</i> (1995)	Spain	n=86	First episode	Symptoms	No	Low negative symptoms
Jackson <i>et al</i> (1995)	Australia	n=313	First episode	Symptoms	Yes	Prodromal symptoms
Akiyama <i>et al</i> (1995)	Japan	n=13	First episode	HVA levels	Yes	
Lim <i>et al</i> (1996)	USA	n=22	First episode	Structural	Yes	Deficit
Larsen <i>et al</i> (1996)	Norway	n=43	First episode	Symptoms	Yes	Prodrome
Albus <i>et al</i> (1996)	Germany	n=40	First episode	Neuropsychol. impairment	Yes	Impaired
Nagaoka <i>et al</i> (1997)	Japan	n=32	First episode	Monoamine measurement	No	
Favre <i>et al</i> (1997)	Switzerland	n=59	First episode	Drug treatment	No	Poor compliance
Gupta <i>et al</i> (1997)	USA	n=35	First episode	Symptoms	Yes	Follow-up
Arminger <i>et al</i> (1997)	Austria	n=50	First episode	Follow-up	No	Case notes
Hoefler <i>et al</i> (1997)	Germany	n=19	First episode	Structural	No	No differences

Table 2.3 (page 7 of 8) First episode studies of schizophrenia

Study	Country	Type and size of population	Target group or sample	Main aim	Exclusion criteria described	Remarks
Salisbury <i>et al</i> (1998)	USA	n=14	First episode	Functional	Yes	Abnormality
Haefner <i>et al</i> (1998)	Denmark	n=232	First episode	Longitudinal	No	Follow-up
Zipursky <i>et al</i> (1998a)	USA	n=26	First episode	MRI	Yes	Drug-free
Zipursky <i>et al</i> (1998b)	USA	n=77	First episode	MRI	Yes	Drug-free
Merlo <i>et al</i> (1998)	Switzerland	n=13	First episode	EEG	No	
Hutton <i>et al</i> (1998)	UK	n=36	First episode	Smooth pursuit velocity	Yes	
Zorilla <i>et al</i> (1998)	USA	n=38	First episode	Haematologic studies	No	

Table 2.3 (page 8 of 8) First episode studies of schizophrenia

Study	Country	Prevalence per 1000	Incidence per 1000	Morbid risk per 1000	Remarks
Brugger (1931)	Germany	1.9		0.38	per 1000 all ages
Brugger (1933)	Germany	2.2		0.41	per 1000 all ages
Klempner (1933)	Germany	10	-	1.4	
Brugger (1938)	Germany	1.8		0.36	per 1000 all ages
Strömngren (1938)	Denmark			0.58	
Lemkau <i>et al</i> (1942a,b)	USA	2.9			Urban
Mayer-Gross(1942)	Scotland	4.2			Mixed
Fremming (1947)	Denmark	-	-	0.9	
Sjörge (1948)	Sweden	4.6		1.60	Equal m and f
Larsson & Sjörge (1954)					
Böök (1953)	Sweden	9.5		2.66	15-50
Böök <i>et al</i> (1978)	Sweden	17.0		2.68 (m) 2.27 (f)	
Essen-Möller <i>et al</i> (1956)	Sweden	6.7 (3.9*)			* psychotic on census date
Hollingshead & Redlich (1958)	USA		0.30		Aged 15+
Lin <i>et al</i> (1969)	Taiwan	1.4			All ages; lifetime
Roth (1960)	USA	1.7			Rural
Yoo(1962)	Korea	3.8			Rural
Helgason (1964)	Iceland	-	-	0.57-0.69 (m) 0.90-1.02 (f)	up to age 61

Table 2.4 (page 1 of 3) Selected studies of Prevalence and incidence rates of schizophrenia across different countries

Study	Country	Prevalence per 1000	Incidence per 1000	Morbid risk per 1000	Remarks
Krasik(1965)	USSR	3.1 2.6			Urban Rural
Hagnell (1966)	Sweden	4.5			
Dube(1970)	India	2.2			Mixed
Crocetti <i>et al</i> (1971)	Yugoslavia	5.9			
Bash & Basch-Liechti(1972)	Iran	2.1			Rural
Jablensky <i>et al</i> (1972)	Bulgaria	2.8			Urban
Zharikov(1972)	USSR	5.1			Urban
Rotstein (1977)	USSR	3.8			
Wijesinghe <i>et al</i> (1978)	Sri Lanka	5.6			Age 15+
Nicole <i>et al</i> (1992)	Canada	-	0.31		First admission
Service Contact Studies					
Ödegaard (1946)	Norway		0.24	1.87	Age 10+
Norris (1959)	UK		0.17		
Adelstein <i>et al</i> (1968)	UK		0.35 (m) 2.26 (f)		Age 15+
Walsh (1969)	Ireland		0.57 (m) 0.46 (f)		Age 10+
Häfner & Reiman (1970)	FRG		0.54		
Lieberman (1974)	USSR		0.20 (m) 0.19 (f)		

Table 2.4 (page 2 of 3) Selected studies of Prevalence and incidence rates of schizophrenia across different countries

Study	Country	Prevalence per 1000	Incidence per 1000	Morbid risk per 1000	Remarks
Torrey <i>et al</i> (1974)	Papua New Guinea	0.1-0.291			Case notes
Temkov <i>et al</i> (1975)	Bulgaria	2.8			
Nielsen (1976)	Denmark	2.7	0.20		
Helgason L. (1977)	Iceland		0.27	0.43 (m) 0.54 (f)	
Krupinski & Alexander (1983)	Australia		0.18		
Dilling & Weyerer (1984)	Germany	4.0			All ages
Haldin (1984)	Sweden	6.0			Ages 18-65
Sikanartey & Eaton (1984)	Ghana	1.68 (m) 0.26 (f)			Ages 25-44
Munk-Jorgensen (1986a,b)	Denmark		0.15 (m) 0.90 (f)		All ages
Community					
Robins <i>et al</i> (1984)	USA (3 sites)	1.1 1.9 2.0			Age 18+

Table 2.4 (page 3 of 3) Selected studies of Prevalence and incidence rates of schizophrenia across different countries

2.5 RACE AND ETHNICITY

Before reviewing the literature on incidence of schizophrenia in the UK where the ethnic distribution of the patients has been taken into account, it is absolutely critical that the reader is aware of the problems in defining race and ethnicity. The researchers may not give any reasons for not including ethnicity in their data or, if they do include it, for not defining it. In addition, there is always the danger on the one hand that any definition may be either too narrow, thereby making it inapplicable to the ethnic groups under study, or else too general, thereby making it devoid of any substantive meaning. For example, Naroll's (1964) definition of ethnic unit as people who are domestic speakers of a common distinct language and who belong either to the same state or the same contact group, i.e., at least two nuclear families in relative territorial contiguity, may well prove to be a useful definition for the purposes of anthropological research into "tribal" societies but it would be difficult to apply it to ethnic groups across Western Europe.

Ethnicity, ethnic identity or ethnic group are often used interchangeably to describe an individual's characteristics which may identify that individual to others. Royce (1982) suggests that there are two approaches to understanding ethnicity - first by using ethnicity and identity primarily at an institutional level whereas the second approach is in the understanding of ethnicity at an individual level.

The exact definition of a specific ethnic group varies across continents eg. Asians in the USA refers to people from all over the Asian continent but largely to the Far East Asian communities. The inherent inadequacies of ethnic categories is surprising because ethnic group is after all 'a social group characterised by distinctive social and cultural tradition, maintained with the group from generation to generation, a common history and origin, and a sense of identification with the group....(members) have distinctive features in their way of life, shared experiences and often a common genetic heritage' (Last 1995). Thus ethnicity can be seen to be a dummy variable or a crude proxy for complex contributions of social and economic and cultural circumstances.

Ethnic categories are ascriptively mobilised by members of society to mediate and represent the dominant tensions to do with identity and belonging and deprivation and injustice (Gupta 1995). Thus these are inevitably fluid and accommodate to the required configuration which makes it even more difficult for researchers to agree to these definitions. Ethnicity is not necessarily an objective criterion because it may be seen as a process whereby one group constructs its distinctiveness from another. These processes of boundary construction vary over time and are subject to economic, political and social pressures. Thus bonds of ethnicity may be strengthened, weakened or dissolved depending upon a large number of factors. Although more subtle characteristics of ethnicity including place of birth, first language and religion remain relatively stable. The definition of ethnicity must be explicit and identified by the individual rather than by researchers.

Ethnic groups belong to cultural groupings and culture is defined as shared systems of concepts or mental representations established by convention and reproduced by additional transmission. In research often ethnic groups get equated with cultural groups. For example, Punjabis as a group originated from Punjab but include Hindus, Sikhs and Muslims. Their language is generally Punjabi though some Punjabi Muslims will speak Urdu. Their religion is different, their language may differ and the place of birth may be different even though their place of origin may be the same. They may listen to Punjabi folk music, Punjabi dances and utilise similar idioms of distress. However, the ethnic Punjabi group may hail from India or Pakistan but Punjabi Sikhs will come from the Indian part of Punjab. Thus Punjabi ethnic group may have Punjabi culture or may have abandoned parts of the Punjabi culture. Some Punjabis may give up their first language altogether or use it selectively in chosen settings. Thus unless it is clearly defined a broad Punjabi ethnic group will cover a multitude of variables. Rather than the researchers attributing ethnicity to such an individual, the individual must ascribe ethnicity to himself or herself. Although much race research has used ethnic categories the flaws of the approach are being examined only now (Smaje 1995, McKenzie and Crowcroft 1996). Ethnic categories based on self ascription were used for the first time in census in 1991. Although a restricted number their key advantage is self-ascription.

In the US, ethnic groups are characterised by some of the following features: common geographic origins, migratory status, race, language or dialect, religions, faith or faiths, ties transcending kinship, neighbourhood and community boundaries, shared traditions, values and symbols, literature, folklore and music, food preferences, settlement and employment patterns, special interest with regard to politics in the homeland and in the US institutions that specifically serve and maintain the group, an internal sense of distinctiveness and an external sense of distinctiveness' (Thernstrom *et al*, 1980). Such a series of characteristics is fraught with difficulties because it is not only over-inclusive but also lacks any rigour. Thus it is difficult to know how many of these characteristics are essential and how many are desirable.

Royce (1982) proposed that three factors must be seen in close connection with ethnic identity and these are power, perception and purpose. Of these, power is perhaps the primary factor and the other two can follow. Thus everyone in a subordinate position can be seen as a member of the ethnic group and the dominant group then has the privilege of assigning roles and laying down rules. Thus, dominants have not only more power than subordinates but also the ability to dictate specific definitions, whether on the basis of religion, class or caste. Using this principle at least one study demonstrated that black students were able to identify and see themselves as black because they were conscious of their minority status whereas their white counterparts did not see themselves as distinctly white (Szalazay and Deese, 1978).

Smith (1993) suggests that in recent times, race as a concept has been defined in social sciences research on political grounds even though social sciences in turn have failed to achieve a reasonable classification of races. Thus a potent combination of emerging new countries and nation states with specific national identities and nationalism along with changing patterns of power means that social sciences and researchers have to define these identities and set down clear inclusion and exclusion criteria.

Royce (1982) points out that the term ethnic is defined in Webster's 7th Collegiate Dictionary as 'neither Christian nor Jewish; heathen; of or relating to races or large groups of people classed according to common traits of customs', and she goes on to suggest that such definitions provide the basis from which most people derive their ideas about appropriate attitudes and behaviour towards others. Within these ideas, a specific notion of limits and boundaries has been introduced by Barth (1960): "cultural factors that signal the boundary may change and the cultural characteristics of the members may likewise be transformed, indeed, even the organisational form of the group may change - yet the fact of continuing dichotomisation between members and outsiders allows us to specify the nature of continuity and investigate the changing cultural form and content."

Individuals use both objective and subjective criteria to identify themselves as members of one group rather than another. Contemporary definitions often use different orders. The Social Sciences Research Council (SSRC) (1974) identified six criteria for the definitions of ethnicity: a past-oriented group identification emphasising origins; some conceptions of cultural and social distinctiveness of the ethnic group to a component unit in a broader system of social relations; the fact that ethnic groups are larger than kin or locality groups and transcend face-to-face interaction, different meanings for ethnic categories both in different social settings and for different individuals and the assumption that ethnic categories are emblematic; having names with meaning both for members and analysts. Royce (1982) criticises this approach as an unwieldy one and in turn offers a succinct definition: an ethnic group is a reference group invoked by people who share a common historical style (which may only be assumed) based on overt features and values and who, through the process of interaction with others, identify themselves as sharing that style. DeVos (1975) suggests that the concept of ethnic identity, like any form of identity, is not only a question of knowing who one is, subjectively, but also of how one is seen from the outside; ethnic identity requires the maintenance of sufficiently consistent behaviour to enable others to place an individual or a group in some given social category.

Thus, to summarise Royce's definition, ethnicity or ethnic identity must be composed of both subjective and objective components and support the notion that ethnic groups are eminently mutable, providing another reference group with which individuals can verify their social strategies.

Senior and Bhopal (1994) argue that ethnicity should not be confused with nationality or migrant status. They highlight the difficulties in measuring ethnicity as a variable for research. Often, countries of birth have been used as an index of ethnicity - an objective but crude method. Some studies have used grandparents' national origin to ascribe ethnicity but even though reflecting accurately individual origins it is rigid and ignores current lifestyles or self-perception. Names analysis have been used, as has a complex method of using the father's name, mother's maiden name, place of birth, self-assessed ethnic identity and stated ethnicity of grandparents (Ecob and Williams, 1991; Hazuda *et al*, 1988). These approaches also mean that only a small number of individuals can be identified to form homogeneous groups.

An alternative can be to define ethnicity in a relatively loose sense, as when people identify themselves as English, Italians, Irish, Indians etc. Isajiw (1974) examined definitions of ethnicity in 65 studies and 27 other sources and suggested that ethnic group can be defined as "a group with a common tradition and a sense of identity which exists as a subgroup of a larger society". The members of an ethnic group differ with regard to certain cultural characteristics from the other members of their society (Theodorson and Theodorson, 1969). Gordon (1964) defined an ethnic group as that which "is defined or set off by race, religion or national origin, or some combination of these categories." Naroll (1964) came up with six criteria with which an ethnic group can be defined - distribution of particular traits being studied, territorial contiguity, political organisation, language, ecological adjustment and local community structure.

Isajiw (1974) suggested that a clear distinction be made between objective and subjective definitions. In contrast to the objective approach by which ethnic groups are assumed to be existing, as it were, "out there", as real phenomena, the subjective approach defines ethnicity as a process by which individuals either identify

themselves as being different from others or belonging to a different group, or are identified as different by others, or both. The psychological identification as being different is on account of the various attributes of one's background, cultural, religious, racial etc. or on account of one's being a member of groups with different backgrounds. Thus individuals can define themselves as members of a foreign culture who participate in the activities of the group (Warner and Stole, 1945). Similarly, others have seen ethnic groups as "people who think of themselves as being of a kind. They are united by emotional bonds and concerned with the preservation of their type" (Shibutani and Kwan, 1965). This sense of belonging is an important feature by which individuals recognise themselves. The common attributes are common ancestral origin, same culture, religion, race and language.

Isajiw (1974) argues that different definitions of ethnicity have to be seen in different contexts - what is applicable in Europe may not be applicable in America. An ideal definition will have both subjective and objective criteria: "a group or category of persons who have common ancestral origins and the same cultural traits, who have a sense of 'peoplehood' and *gemeinschaft* type of relations, who are of immigrant background and have either minority or majority status within a larger society" (Isajiw, 1974).

Race, on the other hand, refers to physical characteristics. In one sense, race ought to be subsumed under cultural traits, especially if seen from the subjective approach to definitions. Subjective definitions consider race as part of the individual's self-definition and if self-definitions of a category of people remain the same over a period of time, they become part and parcel of people's culture. Yet on the other hand, if seen in biological genetic terms, race can be defined as referring to common ancestral origin and hence can be classified together with it.

This overview suggests that any definition of ethnicity must include self-ascription i.e. the way in which an individual defines one's self and whether it is based on the racial origins or a cultural definition or the perception of the individual as seen through the other's eyes. The associated behaviours are additional indicators of the individual identity. Several studies focus on the colour, others on physical

characteristics thereby making any comparisons invalid. Although in the present study the individuals have been asked to use self-ascription the terms like white have been employed to include individuals from various nationalities.

Culture comprises, values explicit and implicit behaviour patterns and historically derived and selected ideas: the entire conglomerate thus being observed, mediated, acquired, absorbed and then transacted through the use of distinctive almost unique symbols. The conceptualisation of culture has led it to be seen as human made or shared meanings – including objective and subjective environments both of which are likely to interact with each other. Culture should be seen as the ground matrix within which biological, psychological and social factors operate. Culture exercises powerful influences on individuals thereby moulding their cultural or ethnic identities. Ethnicity or ethnic identity is often confused with race. As is clear from above, ethnic identity can be measured using a number of measurements ascertaining religious identity, religious functioning; languages spoken, understood or read; food types; taboos and other leisure activities. These are linked with the individual's concepts of the self thereby suggesting that in the end it is the subjectivity of these which is the crux of the identity.

On balance, rather than relying on objective measurements of ethnicity the most important measurement is subjective. How the individuals define themselves and how this definition changes with passage of time becomes relevant. For example, an Indian villager who migrates to the UK after marriage, may well see himself as Punjabi while in India but will see himself as Punjabi Indian in the UK. In due course his ethnic identity may change to Indian and eventually to Indian Britisher or British Indian depending upon which aspects of his own culture have been moulded following contact with the majority culture. The physical appearance or race remains Indian but his self-ascription of his identity may change. His genetic components will remain the same (eg. his DNA composition) but that may not indicate his own view of himself. In this author's view the identity and the concept of the self is very important. There is of course a likelihood that under delusional experiences an individual may distort his own identity. Here we are talking of individuals who do

not have delusions of distorted ethnic identity and are capable of identifying themselves.

An illustration of how definitions of ethnicity vary from researcher to researcher is provided by Ecob and Williams (1991) who created a new ethnic category called Urdu (which is a language and not an ethnic group). Thus while interpreting their findings it is important that readers are aware of fallacy in their definition. Bernstein (1984) suggests that ethnicity should be seen in context with biological relatedness yet differentiated from race. In this author's view primary and secondary characteristics can be amalgamated in the broader context of self-ascription especially if ethnicity is seen as a fluid entity leading to changes in the individual's identity and perceptions of one's self. This sense of self alongwith the collectivism (sociocentrism) or individualism (ego-centrism) of the society can be taken into account while understanding the context of ethnicity. Ethnic identity encompasses changes in ethnic groups which may have some characteristics which remain fairly constant and other changes will continue to take place. Hence again self-ascription appears to be the best possible solution.

2.6 RATES OF SCHIZOPHRENIA IN THREE ETHNIC GROUPS

Most of the studies discussed here have been carried out across cultures whereas it would be of scientific interest to see whether any cultural differences exist within the same broader culture i.e. studying different ethnic groups living in the same culture which is one of the strengths of the present study.

In this section, the rates and key associated features of schizophrenia are presented in the three main ethnic groups. Each group will be presented separately with data and findings from the UK and Western Europe and then specific countries which have thus far been excluded in the present review. The definitions and description of ethnicity used here is not always self-ascription.

2.6.1 RATES OF SCHIZOPHRENIA IN WHITES

As mentioned previously, the term white too is a problematic one to use. Not only does it represent a wide range of ethnic groups, this is a description of skin colour. The underlying heterogeneity of groups under this broad rubric must be remembered.

A majority of the studies presenting rates of schizophrenia were referred to in the previous section. In this section, the focus will be on the data on the white population which has been presented along with the data from one or more other ethnic groups. These are shown in Table 2.5. The rates sometimes present first admission rates which were considered equivalent to inception rates (Cooper 1978) and sometimes the contact rates. Their details are discussed below.

Hemsi (1967) studied admissions to hospitals from the London boroughs of Camberwell and Lambeth during the single year 1961, which coincided with the census date. Making his own diagnosis from the case notes, he screened case records of all seven psychiatric hospitals serving the two boroughs for first admissions during the year. In the first instance, 91% of the West Indians in the group were between the ages of 15 and 54, compared with only 53% of the native-born. To take this skewed distribution into account and prevent it biasing his comparisons, Hemsi chose to confine his study to patients between the ages of 15 and 54. The total annual incidence for psychiatric disorders was found to be 31.1 per 1,000 population for West Indians compared with 10.9 for the native-born - a clear threefold excess. He was able to assign the great bulk of patients to schizophrenia, an affective disorder or a personality disorder and in each category the excess was more than threefold. Schizophrenia in the West Indian men showed the greatest difference from the corresponding native rate, the figures being 13.1 and 2.7 per 1,000, respectively.

It is possible that such a great excess could be due to misdiagnosis or an excess of acute transient psychoses. Hemsi found that there was a large number of cases of atypical psychoses but was able to assign them to one or other of the standard diagnostic categories. Following his observations, he investigated the possible role of the stress of migration by calculating the duration of time in the UK before the onset of symptoms. This was found to be more than 2 years in 47% of the patients, suggesting a negligible influence in at least half his sample. No age standardisation was used in this analysis.

Study	Location	Diagnosis	Age Std	White	A-C	Ratio
Hemsi (1967)	Camberwell Lambeth	Case notes	yes	3	13	5
Cochrane (1977)	England & Wales	MHE data	no	(m) 8.7 (f) 8.7	29.0 32.3	3.3 3.7
Carpenter & Brockington (1980)	Manchester	Hospital	yes	2	11	6
Dean <i>et al</i> (1981)	SE England	Own	yes	(m) 1.1 (f) 1.0	5.5 5.3	5.0 5.3
Littlewood & Lipsedge (1981a,b)	Hackney	Own	yes	2	5	2
McGovern & Cope (1987a)	Birmingham	Hospital	yes	(16-29) 1.4 (30-64) 1.1	11.7 4.7	8.4 4.3
Harrison <i>et al</i> (1988)	Nottingham	Own	yes	(16-29) 2.0 (30-44) 1.6	29.1 19.7	14.6 12.3
Cochrane & Bal (1989)	England & Wales	MHE data	yes	(m) 1.2 (f) 1.2	3.9 3.3	3.3 2.8
Castle <i>et al</i> (1991)	London	Case notes		1965-69 0.88 1970-74 0.98 1980-84 1.20	4.6 7.9 5.08	5.3 8.2 4.0
Thomas <i>et al</i> (1993)	Manchester	Hospital		3.5	32.5	9.2
King <i>et al</i> (1994)	London	Own	yes	1.2	4.6	3.8
Harrison <i>et al</i> (1997)	Nottingham	Own	yes	0.6	6	10.0

Table 2.5 Whites and African-Caribbean incidence rates per 10,000 for schizophrenia from the UK

Cochrane (1977) studied hospital admissions over one year covering the whole of England and Wales. Using four sources of data - the 1971 census, country of birth table, Mental Health Enquiry (MHE) data and the results of an analysis of all admissions to a mental hospital serving an area of high immigrant concentration in Birmingham. Country of birth was used as an independent variable. As the study was confined to patients and populations aged 15 years or more there were relatively few second generation immigrants. The overall category of West Indies included specific countries but, paradoxically, those who gave West Indies as their country of birth were not included.

Age/sex standardisation made little difference to the rates for England and Wales because they contributed most to the definition of the age/sex structure of the total

population upon which the standardisation was based. A comparison of unadjusted age/sex rates shows that all immigrant groups had higher rates than the natives except for Pakistanis and Italians, who had similar rates. In following the established conventions, Cochrane (1977) then allocated all those who had no recorded country of birth to England and Wales and the native rate was exceeded by that of the Scots, the Irish, the Poles and the West Indians, whereas the Indians, Pakistanis, Germans and Italians had a considerably lower rate than the natives. The usually observed excess of female over male admission rates was recorded for the Scottish and Northern Irish and considerably reduced in the Irish Republic group.

The most conspicuous findings with regard to diagnosis applied to both sexes. Schizophrenia showed an excess in most immigrant groups, but especially the West Indians, and an excess of alcoholism was observed in the Scottish, Irish and US groups. The Scottish and the Irish groups had higher rates of drug dependence and personality disorder when compared with the natives. Male and female Poles had higher rates of schizophrenia and the Italian males had lower rates of schizophrenia. Cochrane (1977) argues that some of this excess may be explained by the age structure of the immigrants but there is evidence that Scottish migrants to England have a higher rate of mental illness than Scots who remain in Scotland.

As the author himself acknowledged, there were several problems in this study. First, there were undoubtedly many cases who were not admitted to mental hospitals either because they were not aware of the services or their symptoms were not deemed serious enough. Mental hospital admissions always under-represent true rates of mental illness and the extent of the under-representation may be affected by ethnic factors. Language and cultural difficulties may have increased this under-usage among the immigrant groups. The study used all admissions and not only first admissions. Certain conditions are more likely to relapse and lead to re-admissions than others. In addition, there are two key areas of difficulty. First, by using country of birth as a variable, an individual's ethnicity gets ignored to a large extent. Secondly, the quality of MHE data has not been proven to be high, so the diagnosis entered may not be entirely accurate. However, the study did raise some critical research questions.

In a more detailed but in a similar vein, Carpenter and Brockington (1980), using case notes, studied first admissions in Manchester. The first hospital diagnosis was used. Of 1,261 patients admitted for the first time, 1,159 were British, 6 African, 41 West Indians and 55 Asians. The rate for all immigrants (27.9%) was twice that of the British (13.5%). Schizophrenia was the most common condition diagnosed. The analysis of PSE data which was gathered using Syndrome Check Lists (SCL) showed that the nuclear syndrome and auditory hallucinations were as common in the British group when compared with others. The details of African-Caribbean and Asian samples are discussed later. The study relies on case notes although standardised diagnosis was reached using PSE criteria. They also combined the African group with the African- Caribbeans.

In a further advance in methodology, Dean *et al* (1981) studied first admissions to hospital for the year 1976. They used a prospective case-finding technique in that efforts were made to ensure that place of birth and other data for each admission were recorded. They collected data from South East England and analysed them by age, sex and place of birth. The first time admission rate for British men was 1.1/10,000 and 5.5/10,000 for West Indian men. The rates for females were 1.0/10,000 and 5.3/10,000, respectively. Age stratification did not eliminate these differences. West Indian females had twice the rates recorded in British women on the diagnosis of 'other psychoses'. For this miscellaneous group, the rate was twice that of the British, suggesting that a different diagnostic pattern may be responsible - a theme taken up by other studies especially by Littlewood and Lipsedge (1981a,b). They went on to highlight misdiagnosis as a major issue in explaining the increased rates. They examined the case notes of 250 patients aged 15-45 consecutively admitted to a hospital in Hackney. They allocated to those under 25 the birth place of the parents in order to calculate ethnicity and inception rates. They included all diagnoses, including personality disorders, and judged whether there was a religious flavour to the admission. They categorised each patient as paranoid or not paranoid. With a sample of 37 African-Caribbeans, the rates for first admission for schizophrenia were 47/100,000 compared with 19/100,000 for the British population. A later change of

diagnosis was more likely for the African-Caribbeans, as were the symptoms of religious flavour.

Johnstone and her colleagues (1986,1991) set out to study treatment response and outcome in 253 patients presenting with a first episode of schizophrenia in North London. Of the total, 166 were white, 41 West Indian, 12 African, 25 Asians and one was Chinese. Overall, sixty-nine patients had no educational attainments at all and 104 were living alone. In 46 cases (18%) at least nine other contacts had been made before getting in contact with psychiatric services.. When the authors went on to match 22 African-Caribbean patients with Asians and Whites on a number of parameters, they found that Asians were strikingly more likely to be married and divorced. Substance abuse was an African-Caribbean/Caucasian problem with no differences between the two groups on alcohol or illicit drug abuse. The catchment area contained 8.4% population from the New Commonwealth and 1.32% from Africa or the Caribbean whilst the patient sample comprised 15.5% and 6.4% respectively.

The rates of schizophrenia in the white population in various parts of the world have already been touched upon in the IPSS and DOSMD studies as well as in the section on first episode studies.

In the Epidemiological Catchment Area Study (ECA) (Robins and Regier, 1991), which is a series of five epidemiological research studies with a sample size of 20,000, the Diagnostic Interview Schedule and Health Services Questionnaire were used to reach DSM-III diagnoses. Community populations were sampled both in private households and in institutional residences. The data were then weighted to the characteristics of the nation as a whole in terms of age, sex and ethnic categories. One-year prevalence of schizophrenia in the household population was 1%; for the white group it was 0.9% whereas for the black it was 1.6% and for Hispanics 0.4%. Keith *et al* (1991) conclude that their higher than expected rates when compared with the European sample are the result of large sample, better ascertainment and the use of standard diagnostic criteria.

Thus it would appear from the studies reported that the rates of schizophrenia among the white populations vary according to the criteria chosen for diagnosis. Secondly there are few studies where the ethnicity of patients is described. Although the methods used have gradually become more advanced and rather than relying on case notes or case registers populations are being studied in a prospective manner, the problems with prospective studies too are many and lack of resources is often a key factor as is the possibility of leakages of cases. Prospective studies are good for producing inception rates but not causal links between the illness and social factors, for example. To study causal factors, case control methods are required which can be used to study less common diseases and causal influences on rates.

This section has described some of the studies which have white population samples. The heterogeneity of the samples and variable criteria for diagnosis of schizophrenia need to be emphasised again. In the next sections the rates of schizophrenia in black and Asian populations are described. In some of the studies, symptoms and symptom differences have been described as well in order to avoid duplication of discussion.

2.6.2 RATES OF SCHIZOPHRENIA IN AFRICAN-CARIBBEANS

A key problem in studying the rates of schizophrenia in this group has been the heterogeneity in this population. Secondly the studies have often looked at this sample in isolation from their cultural and social and historical context. Thirdly the studies have highlighted differences rather than similarities. Hence it is important to provide the reader with a historical overview and a few pertinent comments are necessary to put these results in their appropriate context. In the literature the terms that have been used to describe the African-Caribbeans have varied according to the authors. Some authors have used African-Caribbean, others have used Negro and others black. In this review wherever possible these terms have been retained to describe the respective samples for two reasons. Firstly this usage is historically accurate and demonstrates how the terms have evolved. Secondly these terms indicate how the researchers have followed the norms set by the larger society. Such usage although not in practice at the present time highlights some of the difficulties inherent in such research.

2.6.2.1 American Studies: These studies deal with black populations and have not always identified the Caribbean populations which may well have been included in their analyses. Hence direct comparisons between studies in the U.S. and U.K. are not always valid. Babcock (1895), when presenting the data on his 'Negro' cohort, suggested that according to the testimony of travellers as well as natives, mental illness was almost unknown among the savage tribes of Africa, as it was in the southern states of America, although, after emancipation, brain diseases had become much commoner in the Negro. In 1850 the rates were said to be 17.5/100,000 but by 1880 these had shot up to 91.2/100,000. In Virginia, Babcock observed, the increase of insanity in the coloured race had been occurring at the rate of 100% or more every ten years over the past 25 years. He cites Galt, saying in 1848 that the proportion of slaves who became deranged were less than the free coloureds and the whites. This was explained on the basis that the slaves were less likely to get excited because they did not indulge in political discussion, did not participate in religious activities, did not have anxieties about properties and being exposed to the mode of life which they led tended to strengthen the constitution and enable it to resist physical agents which induce insanity. It is possible that this observed increase was to do with the release of mentally ill slaves into the care of asylums whereas previously they may well have been dealt with on the plantations themselves. Babcock reported that mania was much more common among the coloured than whites and thus was due to the loss of the lower developed strata of the mental organism. There are always problems inherent in trying to analyse the historical data simply because the cultural context may not be clear. Furthermore, the slaves may not have been allowed off the plantations because of the effect on the productivity. Thus any rates are likely to be an underestimate initially and the later high rates may reflect a truer picture.

Plummer (1970) similarly cites Benjamin Rush's observation that blacks suffered from hypochondriasis or *mal d'estomac*, which was a painful condition occurring quite early in the period in which the (African) slave was becoming acclimated (acculturated) to the vicious and brutalising system of slavery. This condition Rush believed was caused by grief. Their songs and dances reflected their melancholy and madness, and grief was clearly linked with madness. Interestingly, Rush saw the colour of the black slave as a leprous-type disease and its removal a powerful tool for

dealing with the psychological problems of blacks. He understood the impact of physical differences on the mental attitudes which contributed to racial prejudice and implied that the paranoid or suspicious feelings were related to this prejudice.

Similarly, Green (1914) reported that in 1870 there were 321 whites and 59 Negroes in his institution (a ratio of 6:1) but by 1880 this had changed to 1:4 and the ratio, over the next 20 years, changed to 1:2.2 and had remained at around this figure. Reporting from an asylum in Georgia (USA), Green stated that drugs and toxic psychoses were commoner in the whites, as were psychoses accompanying nervous or brain disease as well as paranoiac conditions. Senile psychoses, general paralysis, dementia praecox and manic-depressive psychosis, on the other hand, were commoner among the Negroes. Acknowledging the reticence with which whites study Negroes, Green suggests that these high rates can be explained on the basis of the individual personality. The implied suspiciousness towards a member of his own class, was to do with fearing bodily harm and the supernatural, leading to a psychosis which, more frequently than in whites, takes the form of dementia praecox. Unclassified psychoses also had a higher than expected rate among the Negroes.

Chassan (1963), reporting on first admissions to a psychiatric hospital in Washington DC between 1950 and 1957, showed that the white males had a higher discharge rate than the white females, who, in turn, had a higher discharge rate than the Negro males whilst the Negro female had the lowest rates of discharge across all age groups. Overall, the white males were twice as likely to be discharged compared with black females. Chassan suggested that the hardships and discrimination which Negroes have had to endure must be considered as a possible source of the intensification of psychopathology in the Negro, whose mental illness may otherwise be more or less equivalent, genetically and in intensity, to that of the mentally ill white. Discharge from an institution obviously depends upon a number of factors which have to be seen separately from the intensity of illness per se. These may include conditions to which the patient returns after discharge, treatment offered and response to treatment as well as socio-economic factors. Thus, by the mid-50s, researchers had started looking for alternative explanations. Brody (1961) postulated that psychosis in the Negro group is a reflection of contradictions in the cultural milieu, of the presence of conflicts

concerning passivity and aggression and of the possible behavioural alternatives to schizophrenia. He studied 10 consecutive Negro male admissions to a segregated hospital. Separation from the father and a stereotypical matriarchal family were seen as very important factors in the onset of illness. Problems in forming relationships, lower socio-economic status and lack of opportunity to develop an individual identity were seen as difficulties in both patients and their controls.

Crawford *et al* (1960) set out to test two hypotheses - first, to see if the incidence rates were lower for Negroes than for whites, and secondly whether, due to relatively disadvantageous positions, the Negro sample would show less understanding and acceptance of mental illness. They based these hypotheses on the previous work which suggested that even though incidence rates (of mental illness) were lower among the Negroes, their commitment rates were considerably higher than those of whites (Lemkau *et al*, 1942a,b; Adler, 1955; Ivins, 1950; Jaco 1957). With ethnically matched interviewers they conducted a community survey with a follow-up. They reported that the "known case" rates were similar for both Negroes and whites. The Negro sample saw the mental illness as a problem patients brought on themselves and, overall, had a lower level of understanding about the mental illness. These authors speculate that because the Negroes lived in a minority culture, when an extremely difficult situation such as mental illness arises, they "invited" dominant white authorities to intercede and exercise legal control over the disturbed individual. This meant that by the time a mentally ill person had been extruded from the family or group, negative feelings towards the individual as well as the mental health care system had become much more prominent.

Fischer (1969) challenged the myth that the Negro had a higher rate of mental illness, showing that the findings had in fact been mixed thus far. Fischer highlighted the problems in differentiating between incidence and prevalence rates that have been already discussed (see section 2.4). Malzberg (1963) had reported that in New York the rates of mental disease among the Negroes were twice those among whites (Malzberg, 1940; 1953; 1956; 1959). Fischer challenged these fallacies on the grounds that the data sources were not entirely clear. Similarly, Wilson and Lantz (1957) reported that in the segregated state of Virginia Negroes had admission rates

twice those of the white population but, again, the data sources were variable. Fischer proposed that these findings must be seen in the context of socio-economic status, rates of admission and factors which influence admission. He urged researchers to control for some of these factors and cautioned that the generalisability of these studies must be considered very carefully.

Many early researchers (Malzberg, 1963; Wilson and Lantz, 1957) suggested that variation in the rates depended upon the diagnoses (see Table 2.6). The effect on Negroes of the white majority's attitudes and discriminatory behaviour were said to affect both help seeking and admission rates (Fischer, 1969). Some authors (Brody, 1961; Rosen and Frank, 1962) have argued that centuries of slavery and the ensuing discrimination have left an indelible mark on the Negro psyche and psychological functioning. In addition, the disruption of family life both in terms of support and role modelling with appropriate help seeking means that the reported rates will be variable.

Of these studies the study by Jaco (1960) is an interesting one because it is one of the few studies that reported a lower than expected differential between the white and the black groups. Among the three groups studied the Anglo-Americans showed the highest incidence rates of all psychoses by far followed by the non-whites and the Spanish-Americans had the lowest rates. In addition, females showed a significantly higher incidence rates of psychoses than males. Jaco (1960) observed that these significant differences were also inherent in specific forms the psychopathology took. He argued that the unusual biases in treatment seeking or diagnostic processes could not explain this differential. In his view the rates were low in the Spanish-Americans not because of their anti-"Anglo medication" attitudes or even misdiagnosis but because these rates were genuinely lower. Some of these differences were clearly in differing sources from where the data were collected e.g. among the private treatment Anglo-Americans had the highest rates whereas among public treatment facilities the rates among the non-whites were the highest. The highest standardised rates for the functional psychosis were seen in the divorced, followed by those for the single, the separated, the widowed and the lowest rates were reported in the married. The highest rates in the Anglo-American and the non-whites were seen in the divorced whereas

the rates were higher among the single Spanish-Americans. Thus there is a possibility that the rates are affected by various social and cultural factors. Jaco (1960) suggests that the differential in the rates is more important than the overall rates in order to understand the aetiological factors.

Parker and Kleiner (1966) in a community survey in Philadelphia, reported that even internal (within the same country, migration produced high rates of psychotic disorders (southern migrants showing a rate of 81%) which may simply reflect their sample which included individuals recruited from psychiatric facilities.

Study	Mental illness incidence		Rates of schizophrenia		Ratio
	N	W	N	W	
Wilson & Lantz (1967)	105	48	22	7	2.2:1
Malzberg (1963)	340	174	112	49	1.96:1
Frumkin (1954)	80	43	19	8	1.8:1
McLean (1949)	173	110	-	-	1.6:1
Faris & Dunham (1939)			41	33	1.3:1
Klee <i>et al</i> (1967)	1950	1650	-	-	1.18:1
Jaco (1960)	53	80	31	38	0.68:1

Table 2.6 Summary of early studies on black and white patients from the US (data based on admissions)

Snowden and Cheung (1990) observed that for all types of inpatient care, schizophrenia was diagnosed consistently more often for blacks (56.3%) than for whites (31.5%), although no significant differences in symptoms were reported. Flaskerud and Hu (1992) made a similar observation but their researchers did not test for inter-rater reliability. Similarly, the evidence that schizophrenia is diagnosed more frequently in blacks has been based on a number of hypotheses - the most frequently cited being the concept of misdiagnosis. Littlewood and Lipsedge (1981a) had felt that the religious flavour in their African-Caribbean patients was suggestive of a different kind of illness. Irrespective of the validity of their claim this argument has become a major issue with both the patients and the professionals especially those belonging to or dealing with minority ethnic groups.

Loring and Powell (1988) mailed two case vignettes to 290 psychiatrists in the USA and found that black men were most likely to be diagnosed as having a paranoid schizophrenic disorders, suggesting that clinicians were partly responsible for augmented rates of paranoid schizophrenia among blacks. Clinicians were also more likely to ascribe violence, suspiciousness and dangerousness to black patients. Black psychiatrists did the same, though to a slightly lesser degree. The authors blame this on internalisation of racist attitudes by black psychiatrists. As the researchers did not assess age or years of experience it is difficult to be certain about their interpretations.

On the other hand, Lewis *et al* (1979) have demonstrated that interpreting the behaviour of black adolescents from low socio-economic urban dwellings as normative has led to professionals missing or ignoring psychotic disorders. These professionals appear to have overcompensated by dismissing recurrent hallucinations as culturally appropriate and by seeing paranoid ideation and behaviour as adaptive to threatening social conditions, thereby treating fewer black patients. Lewis *et al* (1994), in a postal survey of British psychiatrists, also observed that these professionals were more aware of the misdiagnosis issue.

Adebimpe *et al* (1981) reviewed various studies in which hallucinations were reported more frequently in blacks than whites and reported that in their own sample disorientation and auditory hallucinations were found at a significantly higher level among black patients. In a later study, the same group (Adebimpe *et al*, 1982) observed that black rural and urban patients differed in their symptoms and the former were much more likely to be uncooperative and aggressive. Schwab (1979) reported that in a black community in the south-east of the USA there was a higher incidence of young females with hallucinations associated with phobias and emotional distress while older males experienced hypnagogic hallucinations and their abnormal experiences were much more likely to have religious themes or content. Similar findings have been reported by Mukherjee *et al* (1983). Marsh (1995) argues that over-diagnosis of schizophrenia and under-diagnosis of mania along with higher prevalence of hallucinations in blacks suggest that misdiagnosis may be a key factor. Misdiagnosis remains a factor but not a key one in that the role of ethnicity of the

psychiatrists interviewing, the language of the interview and cultural factors affecting idioms of distress in a doctor-patient interaction cannot be underestimated.

The question of misdiagnosis in the USA and the UK has unfortunately become more important in the minds of the general public as well as among professionals than it deserves to be. There is little solid evidence to suggest that misdiagnosis can explain away such high rates of schizophrenia. Furthermore, by using the standardised tools for measuring psychopathology, there is likelihood of accurate assessments leading to correct diagnosis. Using symptoms as a screen rather than diagnostic categories can allow the researchers and clinicians alike to include patients in their sample without missing out on cases, the chief difficulty is to do with diagnosis of neuroses rather than psychoses. Lin (1996) proposes that overdiagnosis of psychotic disorders and schizophrenia in particular can be reduced by using well-defined criteria and with a structured interview. The Present State Examination (PSE) deals with the likelihood of overdiagnosis by providing the researcher with a notion of subcultural delusion which can draw the clinician's attention to the difficulty of deciding whether a belief is delusional (Corin 1996). There is no doubt that differences in vocabulary, communication styles, expressions of distress and value systems all play an important role in consultation and are likely to become possible sources of error. With increasing numbers of individuals being born in this country who are more likely to use same concepts of distress and models of illness as their British peers also makes the misdiagnosis less likely. Wright *et al* (1984) argue that using operational criteria is more likely to eradicate misdiagnosis.

This brief overview of some of the early studies of incidence rates of mental illness and symptom presentation of schizophrenia in the black community in the USA highlights some of the key issues which are becoming important in understanding the differences in the rates of these disorders, across various ethnic groups. Not only are some of the methodological problems similar but the problems in data collection and interpretation are broadly similar as well. Marsh (1995) draws parallels between the US and UK experiences and suggests that the symptoms with which these groups present, as well as their treatment, affect the rates and service utilisation.

In the next section the UK studies which have produced some incidence rates are discussed. Some of the researchers have reported on all psychiatric illnesses whereas others have focussed on schizophrenia.

2.6.2.2 UK Studies

In the UK, one of the early studies which looked at the mental health of African-Caribbeans was the study of Rwegellera (1977). Using the data from the Camberwell register he studied all West Africans and West Indians over a three-year period. Using the 1966 census figures (when these ethnic groups represented 10% of the local population) as the denominator, he went on to calculate inception rates for schizophrenia and found that for West Indians it was 0.92 per 1,000 compared with 0.12 per 1,000 UK born (whites) and 4.18 per 1,000 West Africans. When age standardised, 15-24-year-old West Indians had inception rates of schizophrenia 1.40/1,000 compared with 0.16/1,000 for UK born whites. For ages 25-44, the inception rates of schizophrenia were 0.80/1,000 for West Indians compared with 0.17/1,000 for whites. For West Africans, these rates were 2.87/1,000 and 4.78/1,000, for the two age groups respectively. The rates were significantly much higher for West Indian men than for West Indian women. The West Africans were also likely to have higher rates of paranoid illness compared with West Indians (1.05 Vs 0.40 per 1,000). As the author acknowledged, the study had some major limitations - first, the limited use of psychiatric contact rates to establish psychiatric morbidity in the population; secondly, the small numbers of base population and limitations of geographical catchment area and time period; thirdly, the use of country of birth to determine ethnicity.

In their next study Littlewood and Lipsedge (1981b) personally interviewed 36 patients with symptoms of a "religious flavour" who had been admitted. Wherever possible, the PSE was used to examine their mental state. However, 12 out of 16 patients were extremely disturbed initially, and only the behaviour section of the PSE could be rated at the time. If the PSE was not administered within the first week of admission, the case was termed 'PSE initially impossible'. Of the 36 patients, 20 were African-Caribbeans, 4 West African, and 8 British. Among the first two groups, women formed 70% of the sample compared with only one-third in the other two. Twenty-two patients were given the diagnosis of schizophrenia, of whom 12 did have

at least one first rank symptom. The authors went on to report that the absence of first rank symptoms was associated with a 'PSE initially impossible' status, religious background, change of diagnosis, a precipitating life event and a religious experience more than 5 years prior to the diagnosis. When rated on the PSE behaviour section, all these patients scored heavily on gross excitement, violence, agitation, hostile irritability, suspicion and labile affect. These patients were so disturbed that they were unable to cope with the interview, thereby suggesting that the degree of disturbance was so high that accurate mental state assessment was not possible. The question here then is not whether they were psychotic or not but what type of psychosis they had. The authors observed that once the psychotic symptoms had abated, features of depression became much more obvious. Although the total number of patients is small, the authors suggest that acute psychotic reaction be considered a possible option when discussing these observations. It is possible, they argue, that these cases would turn out to be good prognosis schizophrenia. In view of the apparent importance of social factors in the causation of the acute psychotic reactions, these authors are surprised that none of the delusions and beliefs pertain to twentieth-century technology or post-migration experience. Their view of the underlying depression was that psychotic symptoms were a reflection of depression rather than the other way around.

Leff (1988) challenged this by arguing that depression remains an integral part of psychotic symptoms. He asserted that this finding is not entirely surprising and criticised Littlewood and Lipsedge for ignoring the well-established fact that depressive features are common in classical schizophrenia, occurring in about half the patients and following the same course as psychotic symptoms. It is, of course, likely that depressive features were present at the time of admission but could not be unmasked at the initial assessment. Leff (1988) goes on to suggest that this condition appears identical to the acute transient psychoses seen commonly in less developed countries. However, organic causes appear much less likely here. It is likely that Dean *et al* (1981) may have picked up the same observation of high rates of other psychoses in African-Caribbean women.

Harrison *et al* (1988), using the same criteria and the research techniques used in the IPSS study for which Nottingham was a centre, over a two-year period recruited patients of African-Caribbean origin with first onset of schizophrenia. The aim of the study was to investigate prospectively every patient in the African-Caribbean ethnic group presenting to the psychiatric services with a psychotic illness for the first time. In all, 45 patients met screening criteria for psychosis. Thirty six were inpatients. Full PSE was possible in 39 cases and the Syndrome Check-List was completed for the remainder. Using place of birth as a variable the ethnicity of the head of household the denominator was calculated. The mean annual incidence rate was 13.5/10,000 population aged 15-54, ten times the rate reported among the general Nottingham population. The mean annual rate for the age group 16-29 was 36.4/10,000, 18 times the rate in the 'general population'. The most problematic issue for this study remains the calculation of the denominator. Even though the age band 16-29 can be used to assume that the individuals belonged to younger i.e. second generation and appropriate rates calculated, a lack of information on the ethnicity of individual members in the household thereby getting an accurate denominator, remains a possible source of error. Secondly, they compared these rates of schizophrenia in African-Caribbeans with those previously reported for the white population the data for which had been collected some years previously. Even though Nottingham can be seen as a town with relatively stable population, it is difficult to be certain about the comparisons across a different time frame. When compared with the study by Littlewood and Lipsedge (1981b) the Nottingham sample selection was more epidemiological and the assessment of mental state conducted with rigour. As in previous studies, the African-Caribbean patients with definite schizophrenia included a much higher proportion with both over-activity and under-activity. In view of the stringency of their psychiatric examination and diagnostic techniques, these high rates are unlikely to be explained away by misdiagnosis. Even if the denominator was doubled by two, the rates still remain remarkably high. The migration stress is unlikely to play a role in this explanation as most of the subjects were born in the UK. Thus selective migration also is less likely to an explanation for these high rates in this group because the rates were much higher in the second generation patients than the first generation. However, social factors and disadvantages remain the most likely causative factors.

McGovern and Cope (1987a), around the same period, collected case note information on African-Caribbeans who had been admitted to a hospital in Birmingham. They compared the first admission rates of young white British with those of young British-born African-Caribbeans. Over a three-year period they examined case notes in detail for all those who had been admitted. They too derived their denominators by using OPCS figures for the head of household's place of birth. For 16-29-year-old males, the rates of first admission were 53.8/1,000 for whites, 360.2/1,000 for African-Caribbean migrants and 246.0/1,000 for British-born African-Caribbeans. For 30-64-year-old males, these were 66.5/1,000 and 101.7/1,000 for white and African-Caribbean migrants, respectively. For the younger age group, the rates for white females were 74.0/1,000 compared with 377.8/1,000 for African-Caribbean and 174.2/1,000 for British-born African-Caribbeans. For females aged 30-59, the rates for whites were 100.1/1,000 and for African-Caribbean migrants 106.5/1,000. The rates of schizophrenia were 20.5/1,000 for white males, compared with 138.0/1,000 for African-Caribbeans in the 16-29 age group whilst they were 7.0/1,000 and 98.0/1,000 for females of the same age. In the first generation African-Caribbean males, the rates were 45.3/1,000, compared with 9.8/1,000 for the British and 52.8/1,000 and 13.3/1,000 for African-Caribbean and British females respectively. They argue that the second generation differences are explained by social disadvantage in the younger group. The chief problems with the study are that the patients were not interviewed by the researchers and only inpatients were included in the sample.

Harvey *et al* (1990) studied 54 African-Caribbean and 48 white British consecutive psychotic inpatients over a one-year period. Using PSE they examined all the patients who had passed the initial screen. Ethnicity was recorded according to the physical appearance or family members' ascription. Of the 54 African-Caribbeans, 14 were born in the UK and 34 in the West Indies whilst information for the remainder was unavailable; 25% of the African-Caribbeans and 27% of whites were married. Rates of unemployment were higher among the African-Caribbeans (76%) compared with whites (56%). For 15-24-year-olds, the admission rates for functional psychoses were 186/100,000 for African-Caribbeans and 58 for whites (a relative risk of 3.21) and

315/100,000 and 155/100,000 (a relative risk of 2.03) for the older African-Caribbeans and whites respectively. The psychoses in the African-Caribbeans were brief and pleomorphic. Once again this study highlights the importance of social factors in the aetiology of psychosis.

Castle *et al* (1991) reported on the first contact rates of schizophrenia in the defined area of Camberwell, using the Camberwell Register figures for the years 1965-1984. They observed that rates of schizophrenia rose for the individuals born in the UK from 8.8/100,000 in 1965-69 to 12.6/100,000 in 1980-84. Using case note information they observed that the changes in underlying denominator, with an influx of African-Caribbean males, could have contributed to this increase. Changes in age structure and socio-economic groupings too may have contributed.

Same group of researchers collected all cases of first contact schizophrenia and related conditions from the Camberwell Case Register between 1964 and 1984 and a checklist was used to list symptoms of schizophrenia and then used to get computerised diagnosis(Wessely *et al* (1991)). Controls were sex and age (within 5 years) matched within the same time period. Place of birth and ethnicity were analysed for four time periods of five years each. A total of 130 patients of African-Caribbean ethnicity had received a diagnosis of schizophrenia according to ICD criteria. The risk of schizophrenia was greater in those of African-Caribbean ethnicity, irrespective of age, gender or place of birth. The authors suggest that maternal exposure to unfamiliar infective agents, a differential fall in the age at onset of illness or worsening social adversity were possible causative factors. This worsening social adversity includes social isolation and related lack of support.

Thomas *et al* (1993), too, found that first and re-admission rates were much higher for the African-Caribbeans and these were largely related to increased rates of schizophrenia. However, this too was a case note study. The authors highlighted the role of social factors in the aetiology of schizophrenia and reported that the unemployment was much higher in the African-Caribbeans than among the European or Asian groups. This as well as poor housing and single status were identified as key social factors by these authors. It is likely that this social disadvantage, overall, has

an effect on social support even further. It is possible that these rates may well be the artefact of the sample selection and reliance on case notes.

Although in earlier studies (Bagley, 1971; Bebbington *et al*, 1981) the high rates of schizophrenia in African-Caribbeans were explained away by the process of migration, the likely conclusion being that the second generation will not be affected to the same degree but, as Harrison *et al* (1988) have demonstrated, that has not turned out to be the case, hence the likelihood of other causes needs to be borne in mind.

The general acceptance of the view that migration causes mental illness is so widespread that little effort is made to account for studies yielding contradictory findings. Often these differences are attributed to differences in receptivity to psychiatric treatment or in sophistication about psychiatry but social psychological variables may well prove to be key factors in causation of mental illness. Although there remain key differences in the processes of international and intra-national migration the stresses are not dissimilar and the restlessness of the migrant (in selective migration) ought to play a key role but the rates of schizophrenia are not consistently higher among all the migrant (internal or external (intra-national or international)) groups suggesting that migration although not to be ruled out completely, is not the only causative factor either.

In north London, King *et al* (1994) recruited all 93 first contacts presenting with a diagnosis of psychosis to a variety of community organisations. Fifty were male; 70 were unemployed and another 8 were either housewives or students. Self-assigned ethnic groups were 39 whites, 19 black Caribbeans, 14 black Africans, 5 black other, 5 Indian, 3 Pakistani, 3 other Asians and 5 others. They reported that rates of schizophrenia per 10,000 were 1.2 (CI 0.6-1.9) for whites and 4.6 (CI 2.2-7.1) for black groups among which black Caribbeans were 5.3 (CI 1.8-8.7) and black others 8.1 (CI 0-20.8). With only 2 Pakistani patients they reported the rate in this group to be 15.3 (CI 0-36.5). However, they recruited 88% of the possible subjects and all black Caribbean patients were aged under 29. One of the key problems with the study was

the small numbers in some of the ethnic groups. On this basis they concluded that all immigrant communities have high rates of schizophrenia.

Callan (1996) studied case notes of 50 African-Caribbean immigrants and 41 British born white patients with a hospital diagnosis of schizophrenia over a seven-year period. She found that there was no difference in the number of re-admissions, but in the African-Caribbean group the duration of re-admissions was shorter and involuntary admissions were twice as common.

Harrison *et al* (1997) in another prospective study of psychotic disorders in Nottingham reported on 168 patients presenting for the first time. Using self-ascribed ethnicity and SCAN (Schedule Of Clinical Assessment in Neuro-psychiatry) they observed that of their cohort 124 were European and 32 were first or second generation migrants. The Standardised Incidence Rate (SIR) for all psychotic disorders was elevated in the African-Caribbean group. Age-standardised rate ratio between the African-Caribbean group and the white sample was 8.1 with S.I.R. for F-20 schizophrenia per 100,000 being 46.7 and 5.7 respectively in the two groups. As 81% of the African-Caribbeans were born in the UK and the rest in the Caribbean especially in Jamaica, it appears that the rates are high in both the groups. This study provides a robust evidence that the rates of schizophrenia are high in this population. The authors suggest that migration may well prove to be a significant factor in the aetiology of schizophrenia - a suggestion also put forward by Selten *et al* (1997) who reported high rates of schizophrenia in Surinamese and Dutch Antilleans who had migrated to the Netherlands, although their method has been criticised by Mortensen *et al* (1997).

Nazroo (1997) reporting on the Policy Studies Institute survey of mental illness in ethnic minorities asserted that although the annual prevalence of non-affective psychosis estimated was higher for African-Caribbeans when compared with whites (13/1000 vs 8/1000) these differences were not statistically significant. Interestingly he attributes these differences to high rates among Caribbean women. The rates among Indians/Pakistanis were 6/1000 with only 2/1000 for Chinese. These rates are for all ages – gender and age standardised. This study provides the prevalence data in

the community but the screening instrument used was Psychosis Screening Questionnaire (PSQ) (Bebbington and Nayani 1995). There are several problems with the study. Firstly it is likely that rates of admission are higher due to severity of symptoms. The rates presented here are based on prevalence within a particular population over a particular period which may be affected by a number of factors. For example, we know from Cochrane and Bal's (1981) findings that mentally ill patients are sent back to their country of origin and also rates are affected by the period between onset of treatment and the prevalence study. As Nazroo (1997) himself acknowledges if Caribbeans were likely to have shorter psychosis, the prevalence rate could be lower. Secondly the low rates may reflect under coverage of the group in the community survey. Thirdly and perhaps most seriously a key question from PSQ had been omitted in this survey thereby making the sensitivity of the questionnaire less robust.

Thus far the common themes to emerge from the literature on incidence rates of schizophrenia are that incidence rates are higher among African-Caribbeans when compared with whites and that these rates can be explained only by social factors, such as unemployment, being single, living alone and poor housing. The impact of the process of migration appears to be an unlikely cause. As studies from the different parts of the Caribbean have shown, the rates of schizophrenia appear to be almost equal to the white rates and much lower than the rates among African-Caribbeans in the UK. The likelihood of genetic factors being responsible for such a high rate is therefore unlikely (Royes, 1961; Hickling and Rodgers-Johnson, 1994; Bhugra *et al*, 1996). These observations led to the formulation of the hypothesis for the present project that the rates of schizophrenia are likely to be higher in the African-Caribbean group when compared with the white subjects.

South Asian immigrants had arrived in the UK around the same period as the African-Caribbeans and broadly for the economic reasons, it is important to review the field and assess whether the causative factors are the same or not. There was a wave of political migration from East Africa (of people of Asian origin) in the early 1970s. This group has hardly been studied at all.

2.6.3 RATES OF SCHIZOPHRENIA IN ASIANS

A majority of the immigrants to the UK have their origins in the Indian subcontinent. As they arrived in the UK for economic reasons at the time as many African-Caribbeans and both groups experienced social discrimination and economic deprivation, it makes sense to compare between the two groups the rates as well as possible aetiological factors and the outcome of schizophrenia.

In this section, the rates of schizophrenia as described in various studies in the Indian subcontinent and studies in the UK where Asian samples have been included will be scrutinised. As previously discussed in section 2.5 on race and ethnicity, self-ascriptions of Asians have been used in various studies. This group is even more heterogeneous than the African-Caribbean group. These two caveats need to be remembered while interpreting these studies.

2.6.3.1 In the Indian sub-continent

The IPSS and DOSMD studies provided a great impetus for other researchers to carry out hospital and community based surveys to measure psychiatric morbidity on the Indian sub-continent.

More population surveys for psychiatric illness have been conducted in India than in any other developing country (Leff, 1988). In the north-eastern state of Uttar Pradesh, Sethi *et al* (1967, 1972, 1974) conducted various population surveys. The first study involved studying 300 urban families and 500 rural families; each family was interviewed by a psychiatrist, a psychologist and a social worker. Using a set of screens 4,481 people were interviewed and 300 were designated as cases. They gave a period prevalence for schizophrenia as 2.5/1,000 but without specifying the period. Dube (1970) studied a sample which was spread over urban, rural and semi-rural geographical areas and the subjects were initially screened and a second phase psychiatric interview was carried out. He reported a prevalence of active schizophrenia to be 1.49/1,000 and total of 2.17/1,000, which is not dissimilar to Sethi *et al's* findings. Elnager *et al* (1971) studied 184 families in a small village in West Bengal using an initial screen and then interviewed by a psychiatrist. The age-corrected prevalence for schizophrenia was 8.0/1,000 - the highest reported figure

from this part of the world. However, the total number of cases was very small, so the prevalence rate cannot be accepted with great confidence.

Thacore *et al* (1975) studied 500 families registered with an urban health centre. Families were screened and then interviewed by the psychiatrists. The prevalence for both schizophrenia and manic-depression was 3.3/1,000 when age corrected. Nandi *et al* (1975, 1976, 1980), in two studies, surveyed rural areas of villages near Calcutta. Following an initial screen and using WHO designed definitions of 'caseness' they reported a prevalence of 2.8/1,000 for schizophrenia in one part and 2.2/1,000 in another area. There were differences according to caste - Brahmins had a higher prevalence, of 7.2/1,000, of schizophrenia.

Carstairs and Kapur (1976) in a well-designed study went on to conduct a community survey. They developed instruments reflecting indigenous approaches to assess mental state. A village was identified as the basis for the study. The authors also studied traditional and modern healers in the village to understand idioms of distress and help-seeking processes. They went on to develop the Indian Psychiatric Interview Schedule (IPIS), which was then piloted, and the Indian Psychiatric Survey Schedule (IPSS) emerged. The psychiatric case rates were 37% in the whole population - females had a 40% rate compared with 32% among the males; 2% of males and 1% of females were diagnosed as having psychosis. This is the first study which used indigenously developed instruments to measure psychiatric morbidity in the community.

Using an epidemiological approach to measure the psychiatric morbidity, in the late 1970s Chakrabarty (1990) carried out a community survey in the slums of Calcutta. The sample included 2,512 families and 13,335 individuals. The head of the family was interviewed to complete the 'family report schedule' and each adult completed the individual report. More than half (54.2%) were males and more men were likely to be single when compared with women (39.9% vs. 25.2%). Overall, women and older individuals were prone to psychiatric disorders. The overall rate for psychoses was 5.0/1,000. When comparisons were made between Bengalis and non-Bengalis, the former had twice the rate of 'psycho-neuroses' (125.7/1,000 vs. 68.6/1,000) but five

times the rates of paranoid states (5.1/1,000 vs. 1.1/1,000). Psychiatric diagnoses were not truly operationalised. Some traditional Bengali terms were also used to identify the psychopathology in the sample. Most of these rates cannot be compared with other surveys largely because of different methods of identification of cases and sample selection.

Rajkumar *et al* (1993) reported that in Madras the prevalence rate for schizophrenia was 2.62/1,000, with an age specific rate in 15-54-year-olds of 3.43/1,000. The prevalence was higher in slum areas (3.43/1,000) than in non-slum areas (2.01/1,000). Using field survey techniques, the authors found that the incidence rate of schizophrenia was 0.21/1,000 in slum areas. They interviewed religious, Ayurvedic and faith healers and, taking leakage into account, they reported a total incidence rate of 0.35/1,000.

In Sri Lanka, Wijesinghe *et al* (1978) carried out a well-designed and carefully conducted study to ascertain the rates of psychiatric disorders in the community. They developed a screening instrument on the basis of 100 case notes which was then used to screen 7,653 individuals in a semi-urban area. Prevalence was calculated over a six-month period and only active cases were included. The prevalence for schizophrenia was 3.8/1,000. By correcting their period prevalence for age, the rate came out to be 5.5/1,000 for the population aged over 15 years.

In India, two key studies have been carried out in the past two decades. Both have used WHO methods for patient recruitment and similar assessment schedules and the patients have been involved in long-term follow-up. Both will be discussed at some length in order to get a flavour of the symptoms and rates, although outcome will be discussed in the next section.

2.6.3.1.1 Indian Council for Medical Research (ICMR) (1988)

In three centres - Madras and Vellore in South India, and Lucknow in North India - a study was set up with the objectives of identifying socio-demographic variables and their role in the aetiology of schizophrenia. Following on from IPSS observations, it was decided to establish whether the course and outcome of schizophrenia are affected by such variables.

All patients presenting to the psychiatric clinics in the three centres over a one-year period were screened using criteria which had previously been established. Each centre had a specific catchment area. A total of 386 patients were recruited - 207 in Lucknow, 96 in Madras and 83 in Vellore. The research tools were the same as used in the DOSMD study. Psychiatric history was taken by a psychiatric social worker. The patients were then followed up for the next four years.

Of the total 386 patients, 244 (63%) were males and 142 (36.8%) females. Madras and Vellore had equal sex distribution. More than half of the sample (58.8%) were married. Madras had a predominantly urban population, Lucknow had an equal distribution among urban and rural population and Vellore had a predominantly rural sample. More than a quarter of the sample (26.2%) had had no schooling at all. In Madras and Vellore, 75% of the sample were from nuclear families compared with only 47% in Lucknow.

The following emerged as important pre-morbid personality traits. About 31% had neurotic traits in childhood, 22% were reportedly very reserved in their adolescence and another 22% were described as being very sensitive. Two-thirds had poor emotional expressivity and 53% showed lack of sympathy. In Madras, the number of patients who were reported to have been suspicious and jealous was significantly less than in the other two centres. The Vellore sample had more obsessive traits such as extreme tidiness, high standards and set routine.

More than half (52.8%) had sought help from religious and traditional healers first, and only 22% from a psychiatrist directly. Two-thirds of the key informants believed that the patients were suffering from mental illness and required psychiatric help. Only 8% attributed the illness to supernatural causes.

Using the PSE data, the researchers observed that the commonest neurotic symptoms were worrying, social withdrawal, irritability, poor sleep and loss of interest. More than half (50.5%) had persecutory delusions and 49% had delusions of reference. Delusions of control were present in 24.9%, delusions of misinterpretation in 18.4%

and grandiose delusions in 80% of the sample. Auditory hallucinations were present in 56% of subjects overall, but ranged from 88% in the Madras sample, 70% in Vellore to 35% in Lucknow. In the total group, lack of insight was the commonest symptom - a finding similar to the IPSS findings. Social impairment, blunted affect, self neglect and incoherent speech were other common symptoms.

The study included not only first contacts but all contacts and no attempts were made to look for leakage of cases. No other sources of help were approached. Although the main aim of the study was to ascertain social and demographic factors for the purposes of predicting relapse, it is likely that more severe or disturbed cases will get in touch with psychiatric services. The relapse may well be linked with type of symptoms and mode of onset.

ICMR (1989) had also set up another multi-centre collaborative study to ascertain diagnostic and prognostic features of acute psychosis. For this study data were collected in four centres - Patiala and Bikaner in North India, Vellore in South India and Goa in West India. The IPSS had suggested that single episodes with full remission were more frequent in Nigeria and India (58% and 50%, respectively). In the ICMR (1989) study, acute psychosis was studied with inclusion criteria based on age, sudden onset (less than two weeks), contact within 4 weeks of the onset of symptoms and presence of delusions, hallucinations, confusion, disorientation, excitement or withdrawal, marked elation or depression. Epilepsy, gross organic brain disorder, mental retardation, past history of psychosis were exclusion criteria. From the four centres, after a preparatory pilot phase, a total of 323 patients were recruited. Of these, 176 were male but in the Vellore sample there were more females (56%) compared with other centres. Half the sample (52.4%) were married and 27% were illiterate with another 11% having no systematic education. Educational levels were lowest in Vellore. Overall, 51% of the sample had average socio-economic status. In more than half the cases (53.8%), onset was less than 48 hours and only 13% showed an onset of psychosis to be sub-acute. In the total sample the prevalence rate of all psychoses was 8.7%. More than one-third (35%) were diagnosed as having schizophrenia according to ICD criteria and 40% as other non-organic psychosis. Using CATEGO, 22% fell into the category of uncertain psychotic class and another

13% were assigned to more than one diagnostic category; thus, 37% could not be classified, though between CATEGO and ICD diagnosis there was a very high level of concordance.

The predominant clinical feature was that of paranoid reaction - delusions of persecution were seen in 51% of cases and 49.7% showed features of suspiciousness. Delusions of reference were reported by 42.5% of patients and 34% had visual or auditory hallucinations. Perplexity was seen in 36.4% of patients.

On the basis of one-year follow-up, authors suggest that best outcome was seen in 75% of cases; outcome was related to age, sex, pre-morbid personality, family history and presence of stressful events.

Collins *et al* (1996) used existing data from the Chandigarh and Agra sites in the two WHO studies and, combining these with Ibadan, set out to ascertain the exposure of the patients and compared these with non-acute cases who were described as controls. Fever, departure from or return to parental village in women and job distress were identified as key factors in the genesis of acute psychoses. Social identity and social role played important causative roles. Although this was a retrospective study relying on the case notes, where the temporal relationships between these exposures and symptoms are not clearly defined, it highlights the role of social events in rural areas.

Varma *et al* (1996), on the other hand, reported on a cohort of 91 cases from Chandigarh and observed that 51% of the patients had schizophrenia and 44% affective disorder. Using the ICMR (1989) definitions, these authors found that the single most striking finding was the highly favourable course in these patients. Stevens (1987) argued that cases of acute psychosis subsumed under the broader category of schizophrenia were responsible for the overall better prognosis. These factors are discussed at length later in this review. The next step is to look at the rates of psychosis, and schizophrenia in particular, in the Asian population in the UK.

2.6.3.2 Asians in the UK

Compared with the number of studies which have reported on schizophrenia in the African-Caribbean populations of the UK, the number of studies on Asian populations

are fewer. The overview here highlights those studies which include an adequate number of patients, in order to obtain an overall picture.

In one of the earliest studies, Pinto (1970) reported on all Asian born patients who had been recorded on the Camberwell register between 1965 and 1969. The register is based on the contacts made with psychiatric or social services. He identified 40 patients over this period and was able to follow up a majority (33). He gave prevalence rates for Asian men of 238/10,000 compared with 108/10,000 for English men. For women, the prevalence rates were 174/10,000 and 176/10,000 respectively. However, he did not standardise for age and again relied on country of birth to assume ethnic origin. Of the 33 patients he interviewed, he felt that the original diagnosis had been incorrect in five cases of which four of which involved the category of schizophrenia. He changed the diagnosis from depression to schizophrenia in one case and in three cases from schizophrenia to other diagnoses. As he was able to interview these patients in Hindi or Urdu and came from the same cultural background, his diagnoses, although not operationalised, are more likely to be accurate. The change in diagnoses led to bringing down the prevalence rates of schizophrenia to 55/10,000 for Asians compared with 13/10,000 for Camberwell natives.

As an additional step he decided to interview 49 Asian immigrants from the Camberwell case register paired with 49 Asians selected from GP lists in the same area who had not had any psychiatric contact (paired with regard to country of origin, 5-year age group, sex and duration of stay in the UK). There were no differences between the two groups in terms of marital status, housing conditions or social class. However, a significant proportion of patients had positive family history and were more likely to be socially isolated. The latter feature was also linked with poor outcome.

Cochrane's (1977) analysis based on MHE data collected for all hospitals in England and Wales for the year 1971 showed that the prevalence of psychiatric hospital admissions for Indians and Pakistanis was 403/100,000 and 336/100,000, respectively, over the age of 15, and was considerably lower than the British rate of 494/100,000. However, these rates were lower than those reported from African-

Caribbeans and when the diagnostic prevalence was calculated, the prevalence for admission for schizophrenia was higher for both men and women from India and Pakistan, although the Asian rates were less than half those of the African-Caribbean groups. Whereas Cochrane's data shows under-utilisation of services by Asians, Pinto's observations suggest that both Asians and whites use services to the same extent.

Carpenter and Brockington (1980) studied first admission rates for Asian patients. According to hospital diagnoses, the psychiatric conditions responsible for these increased rates were schizophrenia in all groups. Most characteristic symptoms of schizophrenia were not as common as expected in the immigrant groups. For Asians, the rate of schizophrenia was 12.0/10,000, compared with 2.0/10,000 for the British, whereas for personality disorder these figures were 5.7/10,000 and 1.3/10,000 respectively. Their argument that persecuted or sensitive individuals tend to migrate to explain these high figures cannot be supported, in view of the administrative and economic barriers in acquiring visas and subsequent migration. Using case notes and homogenising various groups into one adds to the difficulties of interpretation of the findings.

Dean *et al's* (1981) study made a clear distinction between Indians and Pakistanis. Their data on first admission rates suggested that Indian men and women had three times the expected rate for schizophrenia, whereas for Pakistanis these rates did not differ. The rates of schizophrenia diagnosed in the New Commonwealth admissions were 37.9% for males and 26.3% for females, and these were 3.2 times higher in males and 3.4 times higher in females when compared with whites. This excess was apparent in each of the four age groups. Immigrants from India had three times the expected number of first admissions for schizophrenia. The number of migrants remains small.

Cochrane and Stopes-Roe (1977), conducting a population survey, studied 50 Indian and 50 Pakistani immigrants; controls were recruited, matched on age, sex and place of residence. The median score for psychiatric morbidity was lowest for Pakistanis and Indian scores were slightly higher, but the British scores were the highest. Asians

were more likely to be married and more poorly educated than their British counterparts but showed no difference in occupational status. Both Asian samples reported fewer disruptions in their lives in the previous year than the British. In terms of scores, Indians and Pakistanis were broadly similar while the Indian women scored much higher than Pakistani women. Both Indian and Pakistani subjects had significantly more crowded homes than their British counterparts and for the Indian females the degree of crowding was highly correlated with their psychological morbidity. The findings of lower psychological morbidity in Indians were confirmed in a later study by the same authors (Cochrane and Stopes-Roe, 1981).

Thomas *et al* (1993) studied case notes of all admissions over a 4-year period in central Manchester. The methodological problems with their study have been discussed previously. Here the data on the Asian sample will be presented. Among first admissions, 43% of Europeans and 44% of Asians had a psychotic illness. However, Asians were significantly more likely to be readmitted than Europeans (80% Vs 62%). The same proportion of Asians and Europeans were admitted compulsorily. Rates for first admission for Asians aged 16-29 were lower than those of Europeans. Significantly more Asians were married and the unemployment levels were significantly higher in the African-Caribbeans than in Europeans or Asians. These authors suggest that these high rates linked with unemployment and poor housing must contribute to the aetiology of psychosis.

King *et al* (1994), too, concluded that the rates of psychosis in all migrant communities were higher, including for Asians, when they had only seven Asian patients in their sample and had pooled Indians, Pakistanis etc into one group. The Asians' rate of schizophrenia combined across the three groups was 6.91/10,000, compared with 1.2/10,000 for the whites, even higher than African-Caribbeans.

Gupta (1991) reported that a cohort of immigrants from the Indian subcontinent spent a shorter part of a follow-up period as inpatients in a South London hospital. As this was a case note study, it was not clear whether this observation was related to such artefacts as different types of illness, different response to medication, or different degrees of contact with medical and social services.

Shaikh (1985) and Bhui *et al* (1993) used case note data on admissions to study psychopathology among Asians in Leicester and London, respectively. Shaikh (1985) found that among 69 patients admitted, 52% males and 74% females were married. Asian patients were nearly twice as likely to have received a diagnosis of schizophrenia but less likely to have neurosis or personality disorder. Overall, the proportion of patients being admitted compulsorily was not different from that in the white group which were used as a comparative group.

Bhui *et al* (1993) also used case note identification for ethnicity and clinical diagnosis. More than half the 100 cases (58%) they studied were married and 49 were referred for psychotic symptoms. A total of 14 cases had schizophrenia and, unlike in previous studies, 80% were admitted informally. Paranoid symptoms were recorded in 48% of cases and sexual, religious, grandiose and somatic symptoms were less frequent. An excess of Asian women were diagnosed as having 'other psychosis', which again fits in with atypical psychoses occurring more frequently in Asian females.

In conclusion, the evidence for increased rates of schizophrenia in Asians in the UK is less robust when compared with the evidence for schizophrenia in African-Caribbeans. Although studies have shown relatively high rates, virtually all the studies cited above have methodological flaws. First, they all (except the King *et al* (1994) study) rely on case note diagnoses, and the calculation of denominators remains problematic. Within the case note diagnosis an additional problem that deserves to be considered is that of language. Unlike African-Caribbean group the Asians are more likely to speak other languages than English. Under these circumstances there is more likelihood for missing thought disorder and other psychiatric phenomena if the patients or their carers are interviewed in their second or their third language rather than their primary language. Secondly, even when the study is prospective, the authors make generalisations from a small number of cases (as stated earlier for Asians, King *et al* had only 7 cases). Small numbers combined with forced homogenisation of the group means that no firm conclusions can be drawn.

Asians in the UK have often not been studied in a prospective manner, with a study of all factors which may affect the aetiology as well as perpetuating factors. In addition, when Asians have been studied the researchers have not always taken cultural factors like religious backgrounds into account. The rates of schizophrenia in UK ethnic minorities have to be compared with those in the respective countries of origin so that genetic factors as possibly causative can be studied. Whereas Asians have not been studied at length there are plenty of data on rates of schizophrenia, the reverse is true in the case of African-Caribbeans, who have only a limited number of studies but which have good data on incidence rates of schizophrenia. This review led to the formulation of the hypothesis for the present study that the rates of schizophrenia among Asians are likely to be lower than the rates reported for African-Caribbeans.

In the next section, pathways into care are discussed briefly in order to highlight the problems in seeking help and the effect on incidence rates of relying on admission rates alone.

2.7 PATHWAYS INTO CARE

Help-seeking processes and behaviour on the part of the patients and their carers are determined by a number of complex factors. Some of these are physical (e.g., geographical access to the services), whereas others are more subtle (e.g., models of illness and treatment modalities preferred by the patients and their carers). In addition to ethnicity itself, educational and socio-economic status are important factors, as is the health care system which allows specific approaches (e.g., in the UK virtually all routine referrals to the hospitals have to go through a GP). Kleinman (1980) defines a health care system as a mixture of health care activities as dictated by social, economic and political constraints set by a culture or society. Health care systems are responsible for health care delivery and include patterns of beliefs about the causes of illness, norms governing choice as well as evaluation of treatment with built-in and socially legitimised roles and power relationships. The *raison d'être* of the health care system is to reach a diagnosis and set up a treatment strategy.

It is essential to draw the reader's attention here to the distinction between disease and illness. Disease refers to a malfunctioning of biological and/or psychological

processes, whereas illness refers to the psycho-social experience and meanings of perceived disease (Eisenberg, 1977; Kleinman, 1980). Illness, therefore, includes secondary personal and social responses to a primary malfunctioning in the individual's physiological or psychological status (or both) and involves processes of attention, perception, affective responses and cognition directed at the disease and its manifestations. Illness is the shaping of disease into behaviour and experience created by social, personal and cultural reactions to such a dis-ease. At the level of the individual the perception of illness, and at the level of the health care system the provision of services, link together it determine the pathway that a patient may follow while seeking help.

Investigations into the use of mental health services by ethnic minorities indicate that primary health services are currently severely under-used by them. As discussed in the previous section, the levels of severe mental illness in the minority ethnic groups are not lower but higher; hence perceived lower levels of distress cannot explain the increases in secondary care. As they do not use general practice or primary care services, it appears that different pathways to obtain care are followed by these groups. Cope (1989) argues that there are differences between forensic and other sections, and racial stereotypes and misdiagnosis play a clear role in the excess in civil sections. This needs to be confirmed in future studies, largely because it will be difficult to argue that civil cases are more likely to be misdiagnosed than the forensic cases or vice versa.

Some authors submit that to attribute a pathological significance to beliefs or behaviours that imply a permeability of boundaries between the self and others is intimately linked with the Western concepts of the self as a well-bounded autonomous reality (Fabrega 1989). Thus the clinician's attention to the notions of the cultural differences in the self-concept becomes relevant and may lay the ghost of misdiagnosis to rest. Not only the beliefs held by individuals have to be understood in the specific context of that culture but also the degree of ethnic belonging to weigh the significance of these beliefs and the functions of these belief for the patients and their carers become important.

Research into the help-seeking behaviour of minority ethnic groups is generally limited, although a high proportion of studies have reported on high rates of compulsory admissions, especially among African-Caribbeans (McGovern and Cope, 1987b; Dunn and Fahy, 1990; Harrison *et al*, 1984, 1989; Thomas *et al*, 1993). All these studies except Thomas *et al* have focused on African-Caribbeans. In Bristol, higher rates of psychiatric admissions occurred among those of low social class living in central urban areas and, in this group, immigrants were no more likely than others to be admitted to psychiatric hospitals (Ineichen *et al*, 1984). In Nottingham, the socio-economic profile of African-Caribbeans was the same as that of the rest of the population where rates of schizophrenia were seen to be high (Harrison *et al*, 1989). In addition to low socio-economic status, African-Caribbeans were more likely to be admitted from a public place via a police station with little involvement from their general practitioners and more likely to be admitted under section (Harrison *et al*, 1984).

In Camberwell, African-Caribbeans were more likely to show disturbed behaviour before psychiatric contact and to be admitted compulsorily than were West African or British patients (Rwegellera, 1980). In Nottingham, Harrison *et al* (1989) reported delays in help-seeking and more disturbance later in the course of their illness and compulsory admissions. Dunn and Fahy (1990) observed that African-Caribbeans were more likely to be brought in to psychiatric hospitals under compulsory order and more likely to be treated compulsorily. The data were collected between 1983 and 1985 from the case notes. The African-Caribbean sample was also more likely to be younger and diagnosed as having schizophrenia.

Commander *et al* (1997) screened all admissions over a nine month period in Birmingham and recruited 40 African-Caribbean patients and matched them with 40 Asians and 40 white patients admitted over the same time. Asians were more likely to be born overseas (70%). They reported that the African-Caribbean patients were more likely to be living alone before admission than were whites or Asians and also significantly less likely to be living with family member, hence were more likely to use complex pathways into health care. They were more likely to be seen as violent towards other patients and the staff than the other two groups and also maintained that

they were being told less about their illness. Only 15% Asians were living alone compared with 61% African-Caribbeans and 22% whites. Blacks were more likely to be violent to the staff (32% compared to 15% Asians and 8% whites). The violence to the general public was reported in 30% blacks and 14% whites and 3% Asians. The blacks were more likely to have assaulted someone sexually (15% compared with no whites and 5% Asians) and also more likely to have committed arson (18% compared with 14% Asians) and no whites. However it is not clear whether the sample is first admission or not but these findings raise interesting questions about the individuals' pathology and the resulting pathways.

Thomas *et al* (1993) were the first to report on rates of compulsory admissions for Asians. They confirmed that African-Caribbeans were more likely to be admitted via the police and compulsorily. Although the duration of symptoms in African-Caribbeans and non-Caribbeans was similar, the former sought help at a much later stage. Among first admissions, when psychotic patients were considered there were no differences across the ethnic groups. Among re-admissions, compared with Europeans, more African-Caribbeans and Asians were detained. Thomas *et al* (1993) argue that these higher rates of re-admission may well be explained by high rates of compulsory admission and Europeans may well have been managed on an outpatient basis. Their suggestion that primary care services fail to identify mental illness at an early stage is likely to explain the delay in seeking help. However, it is also possible that carers were able to look after patients for a much longer period and only when they had become unmanageable that compulsory admission or police intervention was sought. Cole *et al* (1995) found that one of the most significant factors governing the pathway taken to receive care was the presence of a carer of some kind to help negotiate the process. Involvement of friends or relatives was found to be strongly associated with avoidance of compulsory admission or coming to the attention of the police.

In the Goldberg and Huxley (1980) model of care there are five steps, or filters, each of which needs to be negotiated before the patient gets into secondary care. However, limited information is available on its applicability to minority ethnic groups. Level one represents the total level of morbidity in the community and the inability of the

individual to attribute meaning to the symptoms which renders him or her likely to move a little further along the pathway by gaining validation from carers and friends which is the level at which psychological morbidity in primary care attenders emerges. At this stage, professional validation may well occur. Even if the patient at this stage has the validation, it does not necessarily follow that the psychiatric nature of symptoms has been detected. Thus progression to subsequent levels depends upon this recognition and further attribution. The identification of symptoms and physical presence of psychological morbidity may well differ in minority ethnic groups, as alluded to in the previous two sections.

Research into the help-seeking behaviours of minority ethnic groups in the UK is scant but investigations conducted in the USA suggest that a majority of black people with mental health problems either seek no help at all or utilise the traditional health care sector and informal social support networks (Neighbors, 1985). Rather than focus on superficial factors like socio-economic status, it is essential that both individual and cultural levels of help-seeking are considered. At an individual level, meanings applied to symptoms which define one's illness are essential in help-seeking. Once a symptom is identified, the individual will make an attempt to assess it and give it an explanatory gloss which would then be agreed with others and a label would then be used for these symptoms before a decision is made to seek help. Then their past experiences with the services, perceived stigma and possible success of such a treatment all come into play before the patients set out to seek help. People may not be generally aware of their resistance to seeking help, as defence mechanisms operate at quite a deep level. Fabrega (1991) suggests that societies, too, need to have both medical and non-medical frameworks for dealing with psychiatric illness. Non-medical frameworks encompass supernatural, religious, moralistic, or magical interpretations of these symptoms. There is a wide variation in the range of possible reactions to psychiatric disorders - some are treated no differently to physical illnesses. However, if symptoms are chronic or are seen as being due to sorcery, witchcraft or punishment for breaking moral taboos (external locus) the individual is less likely to be seen as blameworthy and socially stigmatised.

Karno (1996) illustrates the role of culture on symptoms through the example of falling rates of catatonia which are attributable to early diagnosis and intervention in the West, and suggests that attention be focused on individual symptoms and not on pathological entities. A similar emphasis is put forward by Flarem (1996) who in addition, proposes that heterogeneity of the research samples be encouraged and described in reports.

At the cultural level, it has been suggested that, irrespective of ethnicity, people will turn to their natural support systems first, with statutory organisations as the last resort (Gourash, 1978). Between 70% and 90% of all illness episodes are managed within the popular sector (Kleinman, 1980). It is here that cultural factors come into play, since the patients' carers and friends will express beliefs and standards that are representative of the world view of the larger social group. Some non-western cultures use supernatural models, religious models or naturalistic explanations and the problems are not conceived of in mental health terms and therefore it would not be logical for a mental health professional to be approached. Where psychiatric services are less well resourced, individuals are more likely to seek help from traditional healers (Gater *et al*, 1991), though this has not been investigated systematically in the minority ethnic groups in the UK.

In conclusion, from the available literature it appears that African-Caribbeans (and, to a lesser extent, Asians) are more likely to be admitted to psychiatric hospitals compulsorily. Their models of illness and help-seeking have not been studied at all. The interaction between individuals factors on one hand and cultural and social factors on the other, is key in the process of determining illness behaviour and seeking appropriate help.

2.8 SOCIAL FACTORS AND SCHIZOPHRENIA

The effect that the social environment and social factors such as life events have in the genesis of symptoms as well as in the outcome of schizophrenia is well known. The term migration is used to refer to movements of populations between as well as within nations. The difference between immigrants and ethnic groups is generational and when children of first-generation immigrants settle down in a country they maintain membership of an ethnic group. Even though immigrants to a new country have their

own set of unique problems, they also share major problems with other groups who may have settled there for a considerable length of time.

The selection hypothesis and stress hypothesis have been suggested to explain the relationship between migration and psychopathology. The selection hypothesis indicates that those who are vulnerable to mental illness or those who are already mentally ill tend to migrate. In contrast, the stress hypothesis suggests that psychosocial stressors related to migration are responsible for the mental breakdown of migrants. A key aspect of this stress is related to social isolation and loss of social networks that provide both emotional and instrumental supports. Stress may also be caused by acculturative processes. Goal striving and additional expectations of high achievement but a failure to do so may well add to stress. The nature of migration itself may be stressful when it is involuntary.

Characteristics of the host culture and its treatment of immigrants may mediate the stress response and may determine adaptation to the new environment. The greater the difference between the host culture and the immigrant's culture the greater likelihood of social isolation. A buffer against this may be the presence of a subcommunity. Premigration, migratory and post migration experiences would play an important role in determining psychological vulnerability. On the other hand some migrants will have limited personal resources to deal with stress whereas others will have extended family and community. The processes and reasons for migration are discussed by Rack (1982) and will not be discussed in this review.

Ethnic groups and immigrants are exposed to the same stressful experiences (major life events and daily hassles) as members of majority groups. However their responses may differ due to a number of reasons. Apart from individual differences these responses could be due to past experiences, social networks, family support and other factors.

As the aim of the study is not to focus on the role of migration or acculturation in onset of mental disorders, suffice it to say that within each group due to the heterogeneity of experiences, it would not be possible to draw any causal-effect

conclusions. Early studies focused on society as well as the individual when authors provided theoretical models of institutions (e.g., Goffman, 1961) which could then be used to analyse the structures and functions of psychiatric hospitals. Of these factors, clear data have been obtained on patients and the outcome of their illness as a result of institutionalisation (Wing and Brown, 1970). Other factors, like sex, education, employment and housing, have all been studied in relationship to outcome (see section 2.9) as well as with the onset of schizophrenic illness. The relationship of social factors to aetiology of schizophrenia has not been addressed adequately. Low social class and minority ethnic status are often related hence the causal effect becomes difficult to disentangle.

Unemployment, poverty and lack of adequate housing all contribute to psychological stress in vulnerable individuals. Living conditions, poor physical health due to external environment and limited access to statutory services can provide additional strain on the vulnerable. In this section, three specific factors - education, housing and unemployment - will be discussed at some length. More specific 'individual' factors like sex and race have already been alluded to. The concept of social class is a complex one and has varying meanings. It will be discussed in particular relation to all three factors - education, housing and employment - in detail as well as in its own right albeit briefly.

2.8.1 EMPLOYMENT

In this section, a limited overview of the role and impact of unemployment is discussed. Comprehensive reviews are available elsewhere (Townsend, 1979; Hayes and Nutman, 1981; Kelvin and Jarrett, 1985; Warr, 1987; Smith, 1987; Dumont, 1989).

Unemployment has to be distinguished from lack of work. Whereas employment is defined as 'the work we do for money where as work is a much broader category' (Smith, 1987), unemployment can be seen as a state of worklessness experienced by those who see themselves or are seen by others to be members of the work-force (Hayes and Nutman, 1981). The definition of unemployment here includes the perceptions of others as well. A clear distinction needs to be made between those who have been made unemployed, those who choose to remain so and may well never

have entered the job market and those who have retired, either voluntarily or involuntarily.

Bearing in mind this distinction, and the nature of employment as an organised (institutionalised) social relationship, the impact and social expectations of others will depend upon a number of other factors, such as availability of jobs, the role of others in the same state, gender, ethnicity etc. From key studies of unemployment in the 1930s (e.g., Jahoda *et al*, 1933/1972) to the 1970s (Jahoda, 1987) and other investigations into the psychological effects of unemployment (e.g., Bakke, 1933; Macky & Haines, 1982) it has been suggested that the unemployed suffer emotional instability (Brandt, 1932), reactive depression (Elderston, 1931), loss of self-confidence (Eisenberg and Lazarsfeld, 1938) and prestige (Bakke, 1933). In addition, individuals become fearful (Beckman, 1933), distrustful (Rundquist and Sletto, 1936), bitter (Hall, 1934), hopeless (Jahoda *et al*, 1933/1972) and aimless (Zawadski and Lazarsfeld, 1935).

Unemployment has been clearly linked with unhappiness (Campbell *et al*, 1976), high rates of stress (Cobb *et al*, 1966) and psychiatric disorder (Rueth and Heller, 1981; Kemp and Mercer, 1983). In an intriguing set of studies using historical data, Brenner (1971, 1973, 1976) reported an increase in criminal activities as a result of adverse changes in employment and income in the USA, Canada, England, Wales and Scotland, though this has been disputed by others (Gravelle *et al*, 1981).

Socio-economic status before actual unemployment plays a key role in dealing with the effects of unemployment and its aftermath. The higher the socio-economic status, the better will be the levels of support and financial resources. Scholzman and Verba (1979) noted that the more prestigious the job the less psychologically devastating response was likely to be.

The role of unemployment in psychiatric morbidity is well illustrated with depression but studies relating to psychoses are relatively rare and these consider unemployment as a key life event precipitating the illness rather than a chronic difficulty.

The impact of unemployment in ethnic minority groups and individual's families cannot be underestimated. Ullah (1987) reported that for a number of his subjects being unemployed was simply another feature of being black, in the same way as bad housing and poor educational opportunities were. Thus employment may well be an additional factor taking a back seat to other forms of discrimination that may be accumulating and this accumulative effect may produce inordinate stress, leading to psychotic breakdown. Ullah *et al* (1985) also reported that having someone to turn to for help with money and having someone to suggest things to do were significantly negatively associated with measures of stress.

The increased unemployment among patients compared with the general population could be the consequence of altered behaviour prior to the development of frank psychosis (the social drift hypothesis (Goldberg and Morrison, 1963)). It could, alternatively, indicate that unemployment increases the risk of developing some type of schizophrenia (the social breeder hypothesis (Faris and Dunham 1939)).

Thus unemployment can work as both acute precipitant and chronic adversity.

2.8.2 EDUCATION

In the IPSS and DOSMD studies, education had been shown to be related to outcome. However, the causal effect is not clear. The variety of countries and research centres along with different types of education levels and educational systems make any discussion on the role of education fraught with difficulties. Secondly, without a clear idea of pre-morbid functioning, it is likely that Cohen's (1992a) critique of the differences in memories means that there may well be far too many variables to consider other than education itself. However, education can play a key role in the patient's gaining useful employment after the illness. As the patients in developing countries were shown to have low educational status and yet were largely occupied in the fields and agricultural activities, education must be seen in conjunction with social class.

2.8.3 HOUSING

Unemployment, poverty and poor or inadequate housing are inter-related. There have been a number of key studies looking at the impact of homelessness but not many have looked at chronic difficulties associated with poor or inadequate housing.

Rossi *et al* (1987) observed that being homeless (or poorly or inadequately housed) was a predominantly male condition and black and native Americans constituted considerably more than their proportionate share, with whites and Hispanics being under-represented. Breakey *et al* (1989) conducted detailed examination of a large group of subjects who had been living at a number of sites. They found that only a minority of their 298 males and 230 females were white. They had a multitude of psychiatric and social problems.

The estimates of psychiatric morbidity in this group vary considerably. This is clearly a reflection of the source of data collection as well as diagnostic criteria being used (Table 2.7). The cause and consequence of poor housing and psychiatric morbidity have not been entirely untangled. Thus psychiatric morbidity is also more likely to be that of a chronic variety, especially a disorganised type of schizophrenia, characterised by thought disorder and hallucinations.

The impact of sudden loss of home can be understood in the context of life events and their impact on the precipitation of illness. Ongoing chronic difficulty may well produce chronic disability. The impact on the family of the individual's illness along with those of unemployment, poverty and inadequate housing need to be studied in a systematic manner.

Author	n	Source	Group	Cases of Schizophrenia %	Remarks
Whiteley (1955)	100	Admissions	Male	32	Nearly half were minority ethnic groups
Meyerson (1956)	101	Skid row rehab.	Male	29	
Berry & Orwin (1966)	135	NFA admissions	Male & female	49	
Goldfarb (1970)	200	Alcohol rehab.	-	33	
Tidmarsh & Wood (1972)	79	Lodging houses	Male & female	32	
Priest (1976)	50	Lodging houses	Male	25	
Chmiel et al (1979)	35	Emergency Room		26	
Bassuk et al (1984)	78	Shelter	Male & female	40	Physical disorder common
Vergare & Acre (1981)	193	Shelter	Male & female	48	
Timms & Fry (1989)	124	Hostel	Male	31	
Marshall & Reed (1992)	70	Hostel	Female	71	Physical disorder

Table 2.7 Poor housing and schizophrenia

2.8.4 SOCIAL CLASS

The first admission rates of schizophrenia are said to be generally higher in the urban areas than rural areas, as demonstrated by the IPSS and DOSMD studies as previously discussed in section 2.3. The rates are said to be even higher in central areas of large cities than from the surrounding suburbs. Faris and Dunham (1939) reported this observation from Chicago and this has been since confirmed in several other studies. The highest admission rates are consistently from the poor working class areas adjacent to the business districts and railway stations and the lowest rates are from middle-class suburbs. The correlation of admission rates with geographical areas are

even more impressive than their correlation with social class. It is of course possible that the two run parallel. The admission rates of social classes IV and V are consistently higher than that of other occupational groups. Originally, this was explained as evidence that being born and brought up in a working class family and in the central slums of a big city created a predisposition to develop schizophrenia, as shown recently by Lewis *et al* (1992), who reported that a raised incidence of schizophrenia was found in Swedish conscripts who were brought up in urban areas. However, both phenomena may be seen as arising from selective migration and these high rates are due to social drift into overcrowded, cheap properties rather than these properties by themselves or their environment having anything to do with the genesis of schizophrenia *per se*. Faris and Dunham (1939) used standard definitions of schizophrenia prevalent at that time but they did not have standardised criteria. Their male patients had a later onset of symptoms when compared with females and the differences across rich, high-rental apartment-house districts with a rate of 111/100,000 and in community conurbation of 32, but in the central business district the rate was 1195/100,000. The high rates were consistently in the centre and the lowest consistently in the city's periphery. The rates for 'Negroes' in the same areas broadly paralleled the white rates but within the same areas the Negroes had twice the rates of paranoid and hebephrenic schizophrénias.

Goldberg and Morrison (1963), by studying birth certificates of 672 young male schizophrenics, demonstrated that although the patients themselves came from social classes IV and V their father's social class did not differ from that of the general population and the disparity was due to downward drift. Hollingshead and Redlich (1958) showed that in New Haven, each social class had a distinct structure and exhibited definite types of illness. identified. Class V had the highest incidence of mental illness proportion compared with classes I and II.

They then went on to analyse the data according to sex, age, race, religion and marital status and the association between class and mental illness remained when each of these factors was held constant. They concluded that an inverse relationship does exist between social class and mental illness. The linkage between class status and the distribution of patients in the population followed a characteristic pattern and class

V almost invariably contributed many more patients than its proportion of the population warrants (Hollingshead and Redlich, 1958). More recent studies, especially in the IPSS and DOSMD, have demonstrated broadly similar findings.

To sum up this section, it would appear from the available literature that poverty, unemployment, inadequate housing and poor educational attainments can be seen as key factors associated with social class, which is itself associated with the incidence of both mental illness and schizophrenia. The question needs to be answered is whether ethnicity is more important than social class and the relationship between the two.

2.9 FOLLOW-UP AND OUTCOME STUDIES

The short to medium and long term prognosis of any psychiatric illness is of interest to clinicians for a number of reasons. First, researchers are interested in the course of illness and its response to any management intervention. Secondly, prognosis sets out various criteria by which improvement can be identified and recognised. Thirdly, this allows clinicians to study the deficits if any and link these with diagnostic and prognostic factors, which may well affect subsequent response and functioning of the individual. It is also essential to follow-up patients with schizophrenia because any diagnostic difficulties at the beginning can then be placed into an appropriate context.

Outcome is often very difficult to define. Ciompi (1980) suggests that follow-up observations should be classified under these headings: the end state at follow-up; the development of schizophrenic symptoms and syndromes; the development of additional, not specifically schizophrenic symptoms (such as depression or anxiety); the development of organic brain syndromes, the development of social adaptation and the overall course (combined measure of the preceding evolving aspects). Although superficially very attractive and described as 'linked-open systems' his approach in the six categories is rather woolly and the categories are not robust enough. In addition, such an approach by definition is not mutually exclusive. In practice, he employs outcome as one of the following four possibilities – admission to hospital, type of course, global outcome of schizophrenia and social outcome. Even though he argues for other factors which could influence outcome his definitions of

outcome remain bewildering. The practical easily identifiable categories such as admission to hospital and type of course owe their genesis to the WHO categories.

In this section, a brief overview of some of the follow-up findings from some key studies are discussed:

2.9.1 IPSS (WHO, 1973)

As discussed earlier, in section 2.3, the IPSS was the first multi-centred, multi-cultural study. The IPSS demonstrated, among other things, that patients in different cultures who could be diagnosed as suffering from schizophrenia shared many common symptom features. However, initially similar symptom pictures were associated with highly variable patterns of course and outcome, with a marked predominance of favourable outcomes in the centres in the developing countries (Sartorius *et al*, 1986). The IPSS was the first (large-scale) study to suggest consistent differences in the prognosis of a major mental disorder in culturally and socio-economically contrasting environments.

Two years on, an attempt was made to re-evaluate as many of the original 1,202 patients as possible. Over 97% of all patients were traced and, in all but one centre, an average of 82.1% were seen. They were re-examined using PSE and a social description schedule. Patients were rated on length of the initial psychotic episode, pattern of course (e.g., continuous, remitting with or without relapse), clinical type of subsequent episodes and degree of social impairment and overall outcome. Overall, 26% of all schizophrenics fell into the best outcome group, 18% into the worst outcome group and the remaining were distributed over the three intermediate categories (Sartorius *et al*, 1978; WHO, 1979).

In Agra, Cali and Ibadan, outcome was favourable or very favourable in 66%, 53% and 86% of patients compared with 35% in Aarhus, 36% in London, 48% in Moscow, 34% in Prague and 39% in Washington DC. The authors (Sartorius *et al*, 1978) suggested that social or cultural environment was the possible key to understanding the observed prognostic differences between patients in developing and developed countries. Sartorius *et al* (1986) emphasised that schizophrenic illness occurs with

comparable frequency in different populations and that overall prognosis was better in less industrialised societies.

In the five-year follow-up of the same group of patients, Leff *et al* (1992) reported on a total of 531 patients. The number of patients who had spent up to 15% of their time in psychotic episode was definitely less in developing countries. Nearly 65% of patients in developed countries had done so. The former group had mild or no social disability -when compared with patients in developed countries.

Following up 67 patients with the ICD-9 diagnosis of schizophrenia (which formed the original cohort of the Nottingham centre for the IPSS), Mason *et al* (1996) reported that first relapses and first re-admissions occur during the first five years. Three of the original cohort had committed suicide and another patient had died in suspicious circumstances suggestive of suicide. Twenty five percent of the sample were never readmitted during the follow-up period. The same research group had suggested that two-year follow-up appeared to be highly predictive of 13-year outcome (Harrison *et al* 1996).

2.9.2 DETERMINANTS OF SEVERE MENTAL DISORDER (DOSMD) (JABLENSKY *ET AL*, 1992)

Patients who had been assessed at the initial examination were evaluated by means of two follow-up examinations, scheduled at one year and at two years from the date of the first assessment (the date of the first PSE had been taken as the reference point). An attempt was made to contact all patients. In the first wave, a drop-out of 21.8% was observed from the original 1,379 subjects. Thus a total of 1,078 cases were traced and followed up. Although no socio-demographic differences were noted between those who were interviewed and those who were not, the patients with reported use of street drugs were over-represented in the drop-outs. Honolulu had the highest (57.4%) drop-out rate followed by Rochester (43.6%) whilst rural Chandigarh had the lowest (5.6%).

Every patient for follow-up was interviewed using PSE follow-up schedules and information supplemented by hospital and clinic case notes. Complete remission was seen in 15.1% of cases in all centres in developed countries, varying from 3.5% in

Honolulu to 32.2% in Prague. In the developing countries the overall remission rate was 25.1%, with the lowest (24.3%) in Cali and the highest (51.0%) in Ibadan. A majority of cases overall (50.3%) had a single psychotic episode and a substantial proportion (33.1%) had two or more psychotic episodes and only a minority (14.6%) of patients had an unremitting continuous psychotic illness. Single psychotic episodes in the course of the follow-up ranged from 27.5% in Aarhus to 75.0% in rural Chandigarh.

There were surprisingly few sex-related differences in course and outcome when data from centres in developed and developing countries were aggregated. Overall there was an excess of female subjects who had one single psychotic episode followed by a complete remission and an over-representation of males in the two least favourable patterns. Using multivariate analysis, sex did emerge as a predictor but the magnitude of effect was not of an order that would justify it as a key prognostic factor.

As regards the identified best possible outcomes, in five out of six comparisons, the proportions of patients in the developing countries are considerably higher than the proportions of patients in the centres in developed countries. The proportion of symptom-free patients for over three-quarters of the length of the follow-up period was 38.3% in developing countries and 22.3% in developed countries. Type of household, affective relationship, avoidance of the patient by either close or casual friends did not affect outcome. Sartorius *et al* (1996) suggested that the better outcome of schizophrenia in the developing (non-industrialised countries) societies may well be due to differences in the family's perceptions of mental illness. They also argued that negative symptoms were the best predictors of outcome at the two-year follow-up. Some of the methodological problems in the interpretation of the data have been previously mentioned in section 2.3.

2.9.3 IN INDIANS

Both IPSS and DOSMD studies had provided an impetus to researchers in India, who were aware of better prognosis in schizophrenia, in order to focus on symptoms and outcome.

2.9.3.1 ICMR (1988)

The first study to undertake a research response to the question was ICMR (1988) - a collaborative study based in three centres in India. A total of 386 patients were recruited and two-and five-year follow-up was conducted.

At 2-year follow-up, 64% of patients were in remission and 11% were still in the episode of inclusion (highest proportion in Madras, which is a large metropolis). Nearly one-third (30%) had one relapse in the follow-up period. The syndrome profile at 2-year follow-up was broadly similar to the initial profile. Best outcome at one year was obtained by 22% in Madras, 27% in Vellore and 46% in Lucknow, and these were 28%, 38% and 33%, respectively, in year two. Nine patients committed suicide over the two-year period. Only 83.7% of cases had been traced at this point. The five-year follow-up included complete data on only 74.4% of the original sample. Overall best outcome was noted in 23.7% of patients and 71.8% had an intermediate outcome and 4.5% had worse outcome (compared with 67.2%, 31.0% and 1.7% in the IPSS data).

2.9.3.2 Indian Council for Medical Research(ICMR) (1989)

Stevens (1987) and Wexler (1979) had previously argued that developing countries have better prognosis of schizophrenia, but this has been challenged by Cohen (1992a). ICMR (1989) went on to establish another multi-centre collaborative study to collect data on acute psychoses, which included cases of schizophrenia. A total of 323 patients had been recruited in four centres. At one-year follow-up three-quarters (75%) had fully recovered, with no relapse of psychotic illness at one year. Six per cent of cases were still in the inclusion episode. Outcome was not related to age although shorter duration of illness at the index episode was an indicator of good outcome. Those who had the most acute onset (i.e., less than 48 hours) had the best outcome. The highest number of patients who were still in the index episode of inclusion came from a centre in North India which, according to the authors, had a very high number of cases of schizophrenia. Such a group is interesting because it does not fit in with the definition of acute psychoses or schizophrenia and it may well represent a different diagnostic category.

Murphy and Raman (1971) reported on a 12-year follow-up of mental hospital patients in Mauritius, focusing on patients with schizophrenia. Only the incidence rates of schizophrenia were broadly similar to the British rates-the outcome was markedly different. A proportionately smaller number had functional disability and they showed fewer relapses (the London sample had 49% cases with no symptoms, whereas the Mauritius sample had 64%). Severe disturbance was seen in 17% of the British sample, compared with 8% in Mauritius. They attributed these differences to social roles in which Europeans may be trapped and also strong family ties in Mauritius, which may act as protective factors.

Kulhara and Wig (1978) reported the results of a five-year follow-up and found the same degree of poor prognosis as in European countries thereby confirming Cohen's argument(1992a) as discussed in section 2.3.4. Differences in data collection, diagnostic criteria and other factors may explain the differences. Waxler (1979), too, reported overall better prognosis in Sri Lanka but Lo and Lo (1977) failed to do so from their Hong Kong sample. In a five-year follow-up, Waxler (1979) reported that 45% of her 44 patients did not have any psychosis and 50% of them had normal adjustment, with only 27% with mild maladjustment. Reports of the patients' activities on the day previous to the interview suggested that 58% of the sample were able to lead a normal social role at home as viewed by family members. According to relatives, 42% of patients displayed no social impairment and another 12% were only mildly impaired. Over the 5-year period, 17% never worked while 45% worked continuously and 38% worked occasionally. She claimed that these were explained by large, tolerant families with treatment systems based on short-term care and a system of belief that explains illness in terms of external causation and does not stigmatise the patient.

Varma *et al* (1996) had reported that early full remission in their cases of acute psychoses had been seen in 63% of rural cases compared with 44% of urban cases and rural cases were also twice as likely to have no remission (13%) compared with 6% of urban cases. Thus there are clear trends (in spite of small numbers) in differences between rural and urban India. For a vast majority of cases the index psychotic

episode fully resolved within months and patients showed no social impairment at 12-month follow-up.

Verghese *et al* (1990) followed up a total of 287 patients for 5 years at which point 67% of patients showed good outcome. Regular drug compliance, short duration of illness, absence of economic difficulties, absence of dangerous behaviours and delusions of persecution at intake, presence of agitation at the time of entry into the study, acute onset, absence of schizoid traits in personality, low level of education, rural background and younger age of onset were all significantly related to good outcome.

Thara and Joseph (1995), reporting on a 10-year follow-up of 90 first onset schizophrenics in Madras, of whom they were able to trace 76, observed an association between gender and pattern of course - disability was greater in males, especially in terms of occupational functioning. One-fifth of males and 14% of females made complete recovery and 72.5% of males and 83.0% of females had relapses. Continuous illness was reported in 7.5% of males and 3.0% of females. These differences did not reach statistical significance. Although at five-year follow-up the males had demonstrated a better outcome (Thara and Rajkumar, 1992); this difference appears to have disappeared during the next five years. The sample was outpatients and a significant number could not be traced. Age of onset and the pattern of hospitalisation did not make any difference. From the same institution in Madras, Eaton *et al* (1998) reported on 90 first onset cases of schizophrenia. Affective symptoms predicted early remission from first episode. Flat affect and grandiose delusions predicted longer episodes and shorter remissions. Using the ICMR data, Verghese *et al* (1990) reported that an early age of onset was linked with better outcome. Thus it appears that a range of factors can be associated with better outcome among Indian population in India and Sri Lankans in Sri Lanka. These studies do not make clear the causal and directional effect of these factors on the course of schizophrenia.

Taking into account the repeated observations that developing countries somehow afford a better prognosis for schizophrenia, Cohen (1992a) challenged the suggestions

that better outcome is related to lower stigma towards the mental illness, and an external locus of causation as a key factor. Cohen also argues that the accuracy of the relatives' information about the patient may well be linked with trying to place a higher level of functioning than the truer abilities of the patients. Furthermore, he argues that as informant accuracy in the recall of events and behaviours decreases sharply as time elapses, IPSS authors chose to ignore these interpretations.

The two most critical areas of re-evaluation of cross-cultural research, according to Cohen, are sampling bias in the recruitment of cases. Cohen's assertion is that there are too many powerful socio-economic and socio-cultural forces influencing patterns of illness behaviour and determining access to medical care to justify making hospital admissions the primary source of data. Even though DOSMD case-finding methods are better, there remains a key problem in identifying all helping agencies. Follow-up is inherently unreliable in the study of outcome and course of schizophrenia. Cohen suggests that ethnographic research will be of value in the follow-up. Waxler-Morrison (1992) responded to this critique by arguing that cases, in spite of their having symptoms, may return "back to normal" as seen by others. Warner (1992) argues that the scale of difference in recovery rates in schizophrenia is so great that it must compensate for minor concerns about methodology. He puts forward the suggestion that the differing outcomes may well be related to differing illnesses and differing aetiologies. Hopper (1992) adds that the problems of informant bias have not been adequately proven and suggests that the range of incidence rates in IPSS and DOSMD need to be studied separately, along with the course and outcome. Cohen (1992b) counters the critique by proposing that anthropological research has an essential and almost unique contribution to make by focusing on the individuals and relying on their accounts and by developing multi-disciplinary research projects.

Kulhara (1994) argues that the variables that predict outcome explain at best approximately only 35% of the variance, leaving a large proportion of variance unexplained, but this ignores the study of Verghese *et al* (1990), which claimed to explain 80% of the variance with only eight factors. Although this section has covered the Indian population Table 2.8 illustrates outcome from other non-European countries as well to provide a comparison.

Author	N	Site	Duration in years	Best outcome (%)	Worst outcome (%)
Murphy and Raman (1971)	100	Mauritius	12	64	24
Lo and Lo (1977)	133	Hong Kong	10	20	32
Kulhara and Wig (1987)	174	Chandigarh	5	66	2
IPSS 2-year follow-up (1979)	1202	Agra	2	66	20
		Cali		53	28
		Ibadan		86	7
		Taipei		38	35
		All centres		51	29
Waxler (1979)	44	Sri Lanka	5	45	31
IPSS 5-year follow-up (1992)	1065 (all centres)	Agra	5	42	10
		Cali		11	21
		Ibadan		33	10
ICMR Verghese <i>et al</i> (1989)	386	Vellore	2	66	4
		Madras			
		Lucknow			
Dube <i>et al</i> (1984)	140	Agra	13-14	65	34
Kulhara and Chandiramani (1988)	12	Chandigarh	1.5-2.5	65	34
Leon (1989)	101	Cali	10	51	25
Lee <i>et al</i> (1991)	153	Hong Kong	1	71	29
Tsoi and Wong (1991)	330	Singapore	5	32	17
DOSMD (1992)	1369 (all centres)	Developing	2	62.7	35.7

Table 2.8 Studies of outcome in some non-European countries compared

2.9.4 OUTCOME IN AFRICAN-CARIBBEANS AND ASIANS

For the UK African-Caribbeans, a number of researchers have followed-up a varying number of patients for varying lengths of time. In the following section, some of their findings will be described.

McGovern and Cope (1991), describe a cohort of first admission cases of schizophrenia, age and sex matched these with a white group. The African-Caribbeans were more likely to be single, living alone and were more likely to have symptoms present over a longer period and, like Gupta's (1992) Asians (see below), they were also less likely to have contact with general practitioners. Over the two-year follow-up they were more likely to have been readmitted (48% compared with 28% of whites) and were more likely to default from treatment. In a related study, McGovern and Hemmings (1994) studied 30 white and 40 African-Caribbean patients to ascertain whether defaulting was related to dissatisfaction with services. Black patients preferred home visits and their relatives thought that black patients were more likely to receive better treatment if more black staff were around. These relatives were also much more likely to see substance abuse as a key cause of the problems/symptoms.

Sugarman (1992), using case notes, followed up 39 African-Caribbeans and matched white subjects in Birmingham. These were subsequently interviewed and the author reported that after the 2-6 years of follow-up there were no significant differences between the groups. However, African-Caribbeans were more likely to be experiencing parathymias (inappropriateness, incomprehensibility, incongruity of affect and pressure of speech and hallucinations). A contrasting finding was reported by McKenzie *et al* (1995), who followed up 113 patients with psychotic illness over a 6-10 year period. They observed that the African-Caribbean group were more likely to spend more time in a recovered state during the follow-up period, were less likely to have had a continuous illness and were less likely to have been prescribed antidepressant treatment. Contrary to expectations, there were no differences in hospital use, but they were more likely to have involuntary admissions. These authors argue that this may be explained by higher prevalence of illness with social

precipitants. They also claim that the complex nature of ethnicity as a variable (i.e., its links with social class and education) may well prove to be a key factor.

Birchwood *et al* (1992) carried out a case-note study on a first episode sample and reported a 16% relapse/re-admission rate in the first 12 months after discharge in the Asian sample compared with 30% in whites and 49% in African-Caribbean patients. The course of each subject's contact with services was examined over the 12-month period through a variety of sources. There was a marked male excess in the 16-29-year group - for whites, the overall ratio was 1.32:1, for the African-Caribbeans it was 1.52:1 and for Asians it was 1.41:1. The African-Caribbean sample had an earlier age of onset. Of the total 137, 36 (26%) had ceased contact with services within one year of initial episode. This comprised 18 whites (28%), 8 African-Caribbeans (19%) and 10 Asians (34%) - these were non-significant differences. The only difference to emerge between those who lost contact and those who maintained contact was employment - those who lost contact were more likely to have been employed before admission. One year after discharge, 34% of the sample had been readmitted-14 whites (29.8%), 3 Asians (15.8%) and 17 African-Caribbeans (48.6%). Living alone or with family did not affect the rates. Asians were the least likely to have been admitted compulsorily readmitted (21.0%); 40% of whites and 46% of African-Caribbeans had been so. Nearly 90% of Asians remained with their close family, compared with 70% of whites and 31% of African-Caribbeans.

Gupta (1992) compared Asian patients who had been seen in a South London hospital between 1969 and 1983 with a diagnosis of functional psychoses with indigenous patients who had a similar diagnosis and were in contact with services at the same time. Each group had 86 patients and, from case notes, patients were traced with a follow-up period of between 5 and 20 years and a median of 12 years. Fifty-two Asians, compared with 68 white patients, were accounted for. Follow-up data were collected from GPs. The proportion of patients who were described as 'much improved', 'recovered' or 'well' at the time of their final contact with the hospital was higher in the Asian group but no clear statistically significant differences emerged. The author concluded that there was some suggestion that the mental state of the Asian patients was probably better than that of the control group. It is possible that

immigrant sample may well have failed to take up existing services at the primary care level.

The follow-up studies of schizophrenia do improve our understanding of the aetiology, course and outcome of the illness by providing a continuing picture of symptoms, stresses and response to medication. In the two ethnic minorities the differences are marked, although not many studies have looked at short to medium term follow-up among the Asians.

2.9.5 OUTCOME IN WHITES

Manfred Bleuler (Bleuler, 1993) provided a follow-up on 591 cases of schizophrenia and reported that 10% sink into such severe deterioration that they need permanent nursing care; 35% show long-lasting mild psychotic signs, 35% appear cured or almost cured for long periods and 20% are stable and cured over a number of years. Rabiner *et al* (1986), in a one-year follow-up of patients with first-onset psychosis, reported that 71% of patients with schizophrenia remained in remission. Factors associated with poor outcome were noted to be no maintenance medication, longer duration of illness and pre-morbid asociality. Table 2.9 shows findings from some of the key studies.

Wing (1966), using poor outcome measures of social independence and psychiatric symptoms, in a study of first admission schizophrenic patients, found that 25% were severely ill, 25% were moderately ill and 50% required little care at the end of a 5-year follow-up. Bland *et al* (1978) revealed that 22% of their American sample were severely ill, 25% were moderately ill and 53% showed mild or no disability. Their outcome criteria included psychiatric condition, social adjustment and economic productivity.

Bland and Orn (1978), reporting on a cohort of 45 first admission cases of schizophrenia (of whom they were able to trace 43) 14 years later, suggested that over half the patients were doing well. Of the total sample, 60% had very little or no disability on a number of parameters and about 20% were considered psychiatrically disabled. They suggest that using multiple outcome measures shows that outcome is on a continuum rather than in two or three discrete categories.

Vaillant (1978) reported on 56 cases of schizophrenia who had achieved full remission during 1959-62. Five were lost to follow-up and, of the remaining 51, 20 experienced chronic relapses and were repeatedly re-diagnosed schizophrenic (40%). Bearing in mind that the diagnosis was made by clinicians and that no operationalised diagnostic criteria were used, the author suggests that those schizophrenics who recover are more likely to have affective symptoms.

Ciampi (1980), was able to trace 289 patients out of 1,642 patients diagnosed as having schizophrenia on Bleulerian criteria with an average duration of follow-up of 36.9 years. The longest period was 65 years and 50% of the sample had been ill for over 40 years. About one-quarter had spent more than 20 years in hospital. An acute onset with a phasic course and a favourable outcome was exhibited by 25% of the sample. The most unfavourable (beginning with acute onset and leading directly to a severe end state) was exhibited in 6%. The global outcome of schizophrenia as measured by the end states was favourable in 49% of cases (complete remission in 27% and minor residual in 22%) compared with 42% with unfavourable outcomes of intermediate or severe degree. In social outcome terms, two-fifths were living by themselves or with their family, one-fifth were in community institutions and the rest in hospitals. More than half (57%) were working - two-thirds in part-time and one-third in full-time occupations.

Watt *et al* (1983) studied records of all patients admitted with clinically diagnosed schizophrenia in a psychiatric hospital in Buckinghamshire. Using PSE criteria, 121 subjects were identified. Of these, 48 were first admissions. Excluding 8 deaths and one untraced subject, all subjects were examined 5 years later using the PSE. The authors found that 40% had a good outcome in that they had either not relapsed or if they had there was no deterioration between episodes. This was a larger proportion (58%) for the first admission group. The rest in two groups were not symptom-free between attacks and in the more severe of these groups, the residual symptoms increased following each exacerbation. The clinical outcome was significantly worse for males than females.

Hambrecht *et al* (1992), as part of a systematic research project on the influence of gender factors on age at onset, symptoms and course of schizophrenia, analysed data on gender differences in age of onset from the WHO collaborative study and compared these across five European centres. The WHO study had been set up in seven centres with entry into the study of patients with a clinical diagnosis of schizophrenia. A two-year follow-up data was also available. Of the total 313 patients, analysis showed significant effects of sex and centre on age of onset and similar results were found whether narrow or broad definitions of schizophrenia were applied. In European centres, women had more symptoms of worrying, tiredness or irritability, whereas social behaviour was more disturbed in men. In Balkan countries the nuclear symptoms were more common in women, and in Islamic countries women showed a higher incidence of general anxiety, morbid jealousy and self-depreciation. One-and two-year follow-up showed gender differences in affective symptoms and social behaviour, with a higher incidence blunted affect, social withdrawal, alcohol abuse and self-neglect in men and more signs of situational and free-floating anxiety and depersonalisation or derealisation in women. These authors suggest that there may well be a discriminatory factor in developing countries which may affect help-seeking in women.

In the 5-year follow-up of the Washington group within the IPSS, 60% of the patients showed a good or very good outcome as measured by a global score encompassing symptoms and social functioning (Hawk *et al*, 1975). In the London group within IPSS, the 5-year follow-up showed 49% of patients to have a good symptom outcome and 42% had a good social outcome according to a composite measure of social functioning (Prudo and Blum, 1987).

As shown in Table 2.9, the variation in the studies showing good and poor outcomes is strong and factors responsible cannot always be identified. Those over 10 years follow-up are shown. Various other studies (e.g., Tsuang *et al*, 1979; Harding *et al*, 1987; Müller *et al*, 1986; Schubart *et al*, 1986; Leff *et al*, 1992 and the Scottish Schizophrenia Research Group, 1992) cannot be described in detail. The conclusions are, however, reasonably clear from these studies: first, at the time of follow-up about 50% of patients are in an unfavourable condition with respect to psychopathology and

social functioning; secondly, 50% or so patients require one or more re-admission in the follow-up period.

In this overview, the problems of follow-up and broad findings from a small number of European and American studies have been highlighted. It is clear that symptoms, age at onset, sex and other social factors play an important role in the relapse. As stated above often it is difficult to define outcome.

Author	n	Mean length of follow-up (years)	Recovered (5)	Improved (%)	Not improved (%)
Mayer-Gross (1932)	294	16	30	8	62
Rennie (1939)	222	20	27	13	60
Müller (1951)	194	17	16	17	67
Errera (1957)	54	16	26	26	48
Holmboe and Astrup (1957)	225	12	29	29	42
Eitinger <i>et al</i> (1958)	154	11	12	22	66
Ey (1958)	120	15	45	20	35
Johansen (1958)	98	14	2	35	63
Astrup <i>et al</i> (1963)	435	12	15	17	68
Faergeman (1963)	85	17	52	22	26
Retterstol (1966)	126	16	41	16	43
Vaillant and Funkelsten (1968)	61	11	26	10	64
Achté (1967)	76	15	35	15	50
Noreik <i>et al</i> (1967)	219	22	16	38	46
Beck (1968)	84	30	7	10	83
Stephens (1970)	143	12	24	46	30
Shimazono (1974)	100	13.5	29	37	35
Huber <i>et al</i> (1975)	502	22	22	43	35
Roff (1975)	125	22	43	39	18
Tsuang and Winokur (1975)	139	35	10	35	47
Bland <i>et al</i> (1978)	88	11	51	25	17

Table 2.9 Prognosis and outcome of schizophrenia in western countries

2.10 CONCLUSIONS

In this chapter, some of the key concepts in the historical development of schizophrenia and some important factors which have been linked with onset as well as outcome of schizophrenia have been outlined. However, two key themes emerge.

The first theme is a general one - that schizophrenia is a complex set of symptoms and syndromes and is affected by a number of factors such as unemployment, housing, education and social class at an individual's level. On a more personal level, the concepts of mental illness which affect help seeking vary across cultures and the rates of schizophrenia reported thus far have not always been accurate because studies have reported hospital admission rates. The perceptions of carers and family members affect individuals' help-seeking, compliance as well as outcome.

The second key theme to emerge is the ethnic differences in rates of schizophrenia across various ethnic groups in the UK. Although the evidence for increased rates of all cases of psychosis especially schizophrenia among the African-Caribbeans is strong, some of the key studies have serious methodological problems, first in identifying ethnicity and secondly in calculating the denominators. Asians in the UK on the other hand have had a smaller number of studies. No study has provided a sizeable number of Asians in a prospective manner. The key question that remains unanswered is whether the rate of schizophrenia in the two ethnic groups - Asians and African-Caribbeans who migrated to the United Kingdom at the same time and broadly for the same economic reasons - are the same or not. The decision to focus on schizophrenia was based on the likelihood of obtaining adequate number of patients. Other types of psychoses such as manic-depressive psychoses are rarer and the numbers will be small making numerator calculation more difficult. The Asian group also included East African Asians who migrated due to political reasons hence the heterogeneity of all the groups needs to be remembered.

This literature review has highlighted some of the key issues in the field of schizophrenia. Two important themes to emerge have included differences in inception rates of schizophrenia leading to the development of two hypotheses: firstly that the Asian group will have lower rates of schizophrenia than African-Caribbeans

and secondly that African-Caribbeans will have higher rates when compared with whites. It is apparent that various socio-demographic factors will play a significant role in the causation of schizophrenia inspite of ethnicity.

3. AIMS

3.1 AIMS AND HYPOTHESES

As indicated in the review section, previous studies on rates of schizophrenia in cultural groups (barring a few exceptions in the UK) have focused on prevalent cases, thereby confounding the link between chronicity and risk of onset and ethnicity. This is the first study of a population of Asians which allows a direct comparison in rates of inception of schizophrenia between whites, Asians and African-Caribbeans. These groups were chosen for study for two reasons. Firstly these two minority ethnic groups have a substantial population for the purposes of calculating a denominator and also their ethnic grouping is recognised in the census. Secondly as these groups migrated over the same time period for broadly the same economic reasons, they were the logical choice for comparison not only with each other but also with the host white population.

3.1.1 AIMS

1. To determine inception rates of cases of schizophrenia in Asians, whites and African-Caribbean subgroups in London.
2. To evaluate various socio-cultural and clinical variables which are associated with the onset of schizophrenia in these three groups.
3. To investigate factors such as ethnicity, age, employment, marital status, educational attainments, duration of symptoms and clinical presentation which affect the course of the illness.
4. To determine the pathways to care that members of each group follow, once symptoms have developed and help is being sought.

3.1.2 PRIMARY HYPOTHESES

As derived from the literature review, the following hypotheses were developed for this study. The primary hypotheses were linked with the primary aims:

Hypothesis (H₁): The inception rates of schizophrenia in London will be lower in the Asian group when compared with the white population as studies from the Indian subcontinent have indicated and lower than those reported for the African-Caribbean group.

Hypothesis (H₂): The inception rates of schizophrenia among the African-Caribbean group will be higher than in the white population as shown in previous studies from the UK.

Hypothesis (H₃): One year outcome will be worse in African-Caribbeans compared with whites. Asians are likely to have better outcome than the whites, as found in studies in India.

In addition to the three primary hypotheses the role of various social factors like sex, living with the family or living alone, educational and employment status will be described.

Symptom profiles of schizophrenia in these three ethnic groups will be described alongwith an overview of pathways into care.

3.2 STRATEGY

3.2.1. OVERALL STRATEGY

As the primary aim of the study is to determine inception rates of identified cases of schizophrenia in Asian, white and African-Caribbean communities in London, and subsidiary aims to compare the roles and significance of social factors in outcome, there was no indication for calculating minimum sample sizes for each ethnic group for purposes of comparison. However, a specific strategy to identify the minimum number required in the base population (from which the denominator was to be calculated) was employed.

3.2.2. SAMPLE SIZE CALCULATION

While calculating the sample size the proportion of African-Caribbeans in the base population was taken to be 18%. In addition there were three further assumptions made in order to decide the base population:

- (i) Firstly, proportion of population at risk among African-Caribbeans will be 18% depending upon the OPCS findings of base population. Secondly, the rates of schizophrenia among African-Caribbeans was highest at 14 times that of the white population in Harrison et al (1988) study and lowest at 2.4 by Littlewood and Lipsedge (1981a,b), thus providing a range between 2.4-14.
- (ii) The annual incidence rate of schizophrenia among Caucasians is in the region of 0.02% (as discussed in the literature review).

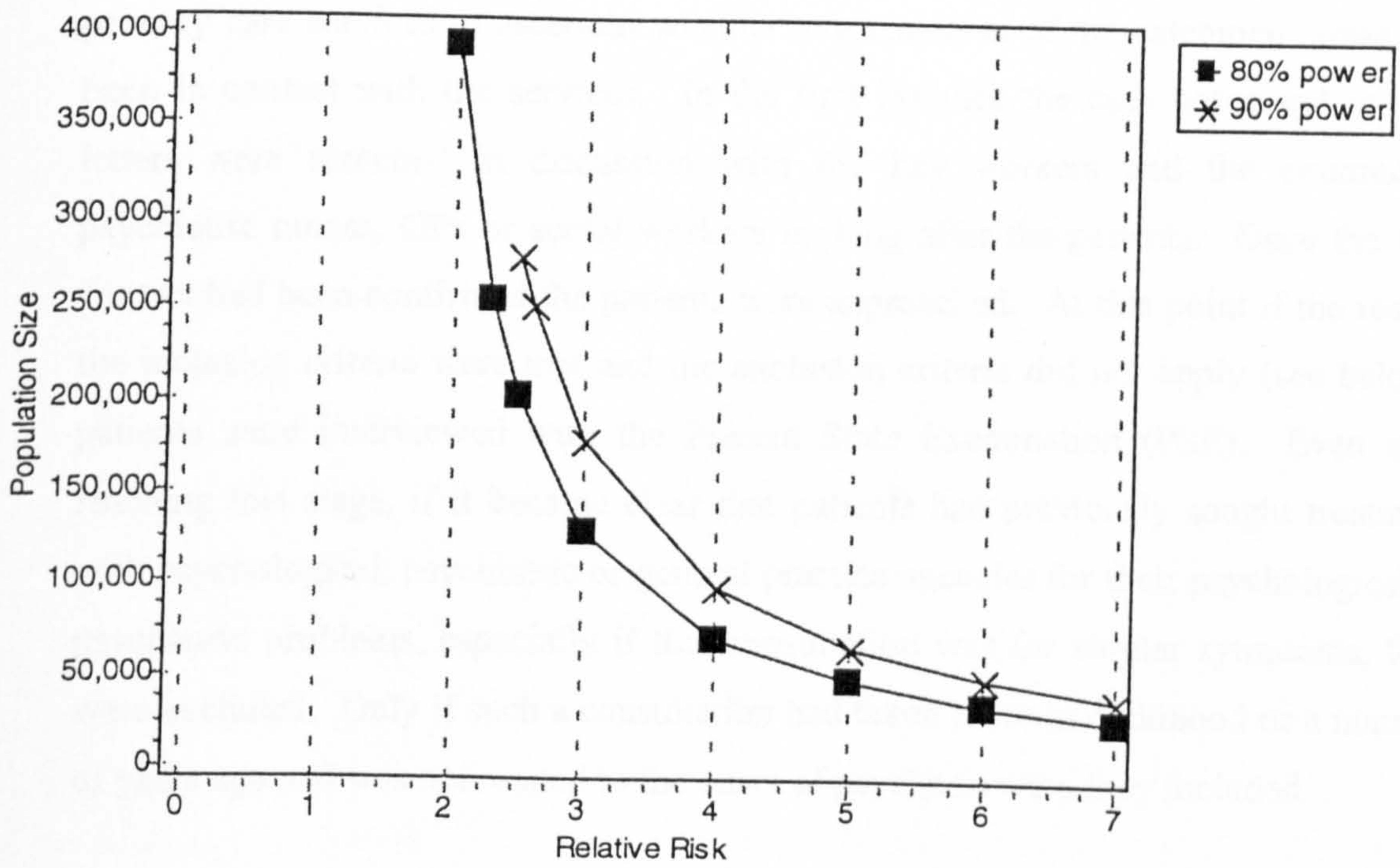
Using Epi-Info 6.0 statistical package a relationship between the required sample size and smallest risk detectable at 80% or 90% power and sample size was plotted. The relative risk for African-Caribbeans when compared with whites was varied from the lowest reported 2.4 to the mean relative risk of 7 in order to calculate the base populations. These findings are illustrated in Figure 3.1 The two lines indicate 90% and 80% power with 95% confidence. Thus for 90% power of detection and at 2.5 relative risk the population base required will be 277,911 and with 80% power and the same relative risk the population required will be 202,717 of the population at risk. When the relative risk was increased to 14, the population at risk would need to be only 12,668 at 90% power with 95% confidence and for 80% power 9220 population will be sufficient according to the statistical calculation.

If the relative risk is taken to be the lowest, using 90% power and 95% confidence the population required increased to 248,672. Similarly when the power was reduced to 80% with 95% confidence the population required was 235,032.

As the population in the catchment areas was 257,330 it met the criteria established by sample size calculation. The steepness of the curve as illustrated in Figure 3.1 is minimal between the relative risk of 2 and 3 thereby suggesting that little is to be gained by more detailed calculations of the population base.

For studying the aetiological factors, it would have been ideal to use case control method which allows study of rare diseases and those with long latency but relies on recall and/or records for information on past exposures and validation of information is often difficult and sometimes impossible. Furthermore as control of extraneous variables is incomplete and selection of an appropriate comparison may be difficult and rates of disease is exposed and unexposed individuals cannot be determined (Schlesselman and Stolley 1982) it was decided to concentrate resources on obtaining inception rates and describing social factors rather than study aetiological social factors in first onset cases of schizophrenia. The search for cases and the choice of and search for a suitable control or comparison group can pose major difficulties.

Figure 3.1 Relative risk and population size required



4. METHOD

4.1 SELECTION OF PATIENTS

Two catchment areas, each with a substantial proportion comprising Asian and/or African-Caribbean people, were identified and the study was conducted in these two areas. One was Ealing, which has 26% Asian (described as originating from the Indian subcontinent) population and 15% African-Caribbean population between the ages of 18 and 64 (OPCS County Monitor, 1992). The second geographical area was South Southwark with a population of 22% black and African-Caribbean descent between the ages of 18 and 64.

4.1.1 ENUMERATION OF SAMPLE

Over a two-year period, 1991-93, all Asian, African-Caribbean and white individuals presenting to psychiatric services were screened for psychosis. Regular contact was maintained with psychiatric staff working in prisons, private hospitals, and local primary care services to ascertain whether any residents of the catchment areas had been in contact with the services. In the first instance the case notes and referral letters were screened in discussion with the key workers and the community psychiatric nurses, GPs or social workers looking after the patients. Once the first contact had been confirmed the patients were approached. At this point if the rest of the inclusion criteria were met and the exclusion criteria did not apply (see below), patients were interviewed with the Present State Examination (PSE). Even after reaching this stage, if it became clear that patients had previously sought treatment with psychological, psychiatric or general practice agencies for their psychological or psychiatric problems, especially if this consultation was for similar symptoms, they were excluded. Only if such a consultation had taken place in childhood or a number of years ago and was not related to the onset of psychosis were they included.

The following were contacted: community mental health centres, outpatient clinics, day care and inpatient facilities, prisons (especially those which were most likely to receive individuals from the catchment areas), regional secure units, domiciliary consultations, community psychiatric nurses, general practitioners and private hospitals. These sources were approached regularly, the frequency depending upon the likelihood of contact with new patients; for example, outpatients, community

mental health centres and wards were contacted two to three times a week, while prisons were screened monthly, and private hospitals every two to three months. All subjects were screened as potential subjects with psychosis according to following inclusion and exclusion criteria.

4.1.2 STUDY PERIOD

The data were collected over a two year period. In the first year all cases of psychosis who met the criteria for inclusion were included from the London Borough of Ealing and only the African-Caribbeans in the South Southwark part of the London Borough of Southwark which forms the catchment area of the Maudsley Hospital. In the second year of the study, in order to accumulate adequate numbers, only Asians and African-Caribbeans were recruited from Ealing and only African-Caribbeans in Southwark. Ethical committees of the three hospitals (Bethlem and Maudsley, King's College Hospital and St Bernards Hospital) and the Institute of Psychiatry were approached and ethical approval was obtained. These are included in the Appendix 1.

4.1.3 INCLUSION AND EXCLUSION CRITERIA

Inclusion criteria were broadly similar to those used by WHO in the IPSS and Determinants of Outcome Study (WHO, 1973; Jablensky *et al*, 1992) and Harrison *et al* (1988). These were as follows:

- (i) Age between 18 and 64 years.
- (ii) One of the following symptoms within the previous year:
 - (a) hallucinations or pseudo-hallucinations in any modality
 - (b) delusions
 - (c) marked thought and speech disorder, thought incoherence, thought blocking, incomprehensibility of speech other than simple retardation
 - (d) emergence or marked exacerbation of odd, bizarre or grossly inappropriate behaviour (e.g. talking or giggling to oneself, loss of social constraints).
- (iii) A definitive change of personality and behaviour as manifested by:
 - (a) marked retardation or loss of interest, initiative and drive
 - (b) emergence or marked exacerbation of social withdrawal
 - (c) severe excitement, purposeless, destructiveness or aggression

- (d) episodic or persistent states of overwhelming fear or severe anxiety
- (e) gross and persistent self-neglect.

The exclusion criteria (for the screen) were as follows:

- (i) IQ below 50
- (ii) Organic cerebral pathology
- (iii) Previous contact with any psychiatric services for similar problems. Minor psychiatric problems a long time ago (e.g. attendance at child guidance clinic) did not count as exclusion.
- (iv) Organic CNS damage due to drug or alcohol manifesting in encephalopathy
- (v) Previous diagnosis of psychotic disorder.

The detailed screening sheet is included as Appendix 2.

4.2 PROCEDURE FOR INCLUSION

The assessment of the patients for inclusion in the study took place according to the following steps. In the first year all cases meeting the inclusion criteria in Ealing were screened. In the second year in Ealing all patients with self-ascribed Asian or African-Caribbean ethnicity were screened. In both years in South Southwark all patients with self-ascribed African-Caribbean ethnicity were screened.

- (i) All potential cases presenting for the first time were identified in the two areas.
- (ii) The patient's key worker, if available, or the doctor responsible for his/her care, was then approached to obtain the current clinical diagnosis.
- (iii) The case notes were then examined, (both medical and nursing), to ascertain the diagnosis, past medical and psychiatric history, history of alcohol or drug abuse (to exclude any underlying brain damage).
- (iv) After discussion with the doctor and/or the key worker, the patient was then approached for interview to assess current mental state and past psychiatric history and personal history. If the patient was not able to complete the full PSE, only the behavioural sections were completed at that interview and subsequent attempts made to complete the PSE.

If the patient did not want to be interviewed and/or the responsible medical officer refused access, the Syndrome Check List (SCL) was filled from the case notes. At this point usually only the mental state examination was carried out. The rest of the data were collected at a suitable time at a later stage. If the patient did not allow access to relatives for detailed history taking, this was obtained as far as possible from the case notes.

4.3 ASSESSMENT MEASURES

The following assessment measures were used:

4.3.1 PRESENT STATE EXAMINATION (PSE) (WING *ET AL*, 1974)

The PSE is a well validated 140-item questionnaire in which questions asked are in three tiers and the presence or absence of symptoms is rated on a 3-point scale. The principles of interviewing and scoring are well established. The interview systematically covers all the phenomena likely to be considered during a mental state examination and by clearly indicating how symptoms are coded, the interviewer can complete the schedule without any need to deviate. The schedule allows interviews to be conducted flexibly while still preserving a substantial degree of standardisation. This schedule consists of a series of questions which must be asked of all subjects. The second tier of questioning deals with details of the questions already asked. An additional level of questions allows the interviewer to ask more questions to clarify the responses already obtained. The standard convention in using the PSE is to focus on the period of illness four weeks (or a month) prior to the interview, this convention being adhered to in the present study.

Wherever possible the patients were approached and the PSE completed within the first 2-3 days of their first contact with services. In virtually all patients this was carried out within the first week of admission. Syndrome Check List (SCL) (Wing *et al*, 1974) data was collected from the notes in the absence of a fully completed PSE once the patients had been identified. The SCL has the advantage that as all the symptom definitions are already known to the clinician experienced in PSE administration, no further special training is required. The rules regarding rating (SCL) are straightforward but conservative.

It was decided to use the 9th edition of the PSE for subject inclusion for three reasons. First, this would allow comparison with data from the WHO studies. Secondly, SCAN (Schedules for Clinical Assessment in Neuropsychiatry) - the next (10th) edition of the PSE - was still in the process of development at the time the study started. Thirdly, a Hindi translation of the PSE was available and well validated in the WHO studies (Wig *et al*, 1982). It is well validated for psychotic symptoms but as these authors (Wig *et al* 1982) observed the most difficult part of the instrument for translation into Hindi was the section on neuroses. They suggested that its administration posed more problems when psychotic symptoms were not present. The limitations of the PSE are well known in identifying personality disorders, organic brain syndromes, drug dependence and so on. Since the aim of the present study was to ascertain inception rates of psychosis and the method for screening was similar to the two WHO studies, it was decided to use the PSE.

In the two sites, a vast majority (80%) of the PSEs were carried out by the author in the preferred language of patients - English, Hindi or Punjabi. All Hindi/Punjabi PSEs were carried out by the author. These are included in Appendix 3. The remaining assessments among white patients and some African-Caribbean patients were conducted by two psychiatric colleagues who were not African-Caribbean but were well versed in the Caribbean culture and were trained to a high level of reliability in the use of the PSE (by using simultaneous ratings on a number of cases) although formal tests of reliability were not carried out.

4.3.1.1 Analysis of the PSE results

The PSE is a descriptive and a categorising instrument; its 140 items cover nearly all phenomena in the psychiatric spectrum. It is specifically designed to identify the presence or absence of symptoms. Detected symptoms generated are divided into four categories: symptoms of delusions and hallucinations (DAH) reported by patients with psychotic disorders, disorders of speech and behaviour (BSO) often seen in patients with psychotic disorders, specific neurotic symptoms (SNR) such as anxiety, obsessional symptoms and symptoms of depression, and lastly non-specific neurotic symptoms (NSN) such as worrying and tension. The CATEGO program is used to ascertain the diagnostic syndromes. These syndromes are selected by defining

a degree of certainty, the degree being specified as well as ranked in a hierarchical system. The description of categories produced by CATEGO match those of the 9th edition of the International Classification of Diseases (ICD-9).

In hierarchical terms, nuclear schizophrenia (with Schneider's first rank symptoms (S+)) is at the top of the pyramid. Any additional symptoms of other classes, such as depression or neuroses, may occur with symptoms of schizophrenia, but the presence of classic symptoms of schizophrenia determines allocation of this category. Lower in the hierarchy are mania and mixed affective states (M+), depressive psychosis (D+), paranoid psychoses (P+), other psychoses (O+), uncertain psychotic classes (S?, P?, M?) and retarded depression (R), in that order. The base of the pyramid consists of neurotic depression (N) and anxiety (A).

The CATEGO program yields categories of syndrome and not diagnosis but, to aid interpretation, Wing and Sturt (1978) developed an Index of Definition (ID) which determines the degree of certainty of a 'case' and has eight levels - the first defined by the absence of any symptoms elicited by the PSE. Levels 2 and 3 indicate non-specific neurotic symptoms and level 4 is characterised by the presence of specific neurotic symptoms like anxiety or depressed mood and level 5 is the 'threshold' level for defining cases. Levels 6-8 represent 'definite disorders'.

In the present study the PSE-CATEGO-ID program was used to analyse PSE scores and to generate diagnostic categories among potential subjects of the study.

Class S+ schizophrenic psychoses contains the central schizophrenic conditions, the characteristic symptoms of thought intrusion, thought broadcast or withdrawal, delusions of control, voices discussing patient in the third person or commenting on thoughts or actions, other auditory hallucinations (not affectively based) and other delusions. The presence of any of the first three symptoms means that the patient is automatically allocated to class S+, as does the presence of both of the last two symptoms.

Class P+ (paranoid psychoses) has as its chief symptoms delusions (other than first rank) and hallucinations (other than auditory).

Class 0+ (other psychoses) has as its chief symptoms catatonic symptoms and behaviour indicative of hallucinations.

Uncertain psychotic classes are S?, P?, O? and these have less certain counterparts in clinical diagnosis. In category S?, voices are experienced as speaking directly to the patient but not characteristic of depression or mania and as the only symptom present. Category P? is the common uncertain psychotic class. It is allocated to cases with delusions of persecution or reference in the absence of more specific diagnostic symptoms and to patients with only 'partial' delusions (overvalued ideas or delusions at a lesser intensity) (Wing *et al*, 1974).

4.3.2 PERSONAL AND PSYCHIATRIC HISTORY SCHEDULE (PPHS, JABLENSKY *ET AL*, 1992)

This schedule was developed for the Determinants of Outcome of Severe Mental Disorder Study (DOSMD). It allows collection of history of present and past episodes of illness treatment, premorbid personality traits, significant events in the life history, psychological adjustment to work and psycho-sexual adjustment, legal and employment history. The information is collected through clinical interview as well as case notes, interviews with relatives or carers as well as professional informants.

The areas included in this schedule were as follows: onset, symptoms and course of illness, treatment sought and sources of treatment, history of contact with various services including medical services, other service providers, behaviour symptoms at any age, patient's premorbid personality traits, life history, work history, psycho-sexual adjustment, history of use of drugs and alcohol, contact with the law, patient's overall satisfaction with premorbid life situation, and assessment of sources of information. This schedule uses a mixture of pre-coded and semi-structured descriptive responses. Since many sources of information can be used to complete the schedule, as much information as possible was gathered on as many questions as possible. A Hindi/Punjabi translation of this schedule was available. These are included in the Appendix 4.

4.4 MODE OF ONSET

In order to determine the pathways that people choose for seeking help, the type of onset is an important consideration. The date of onset was recorded at the time of interview with the patient, looking for non-specific as well as more clearly defined symptoms. As the relatives were also being interviewed for the purposes of determining premorbid personality and symptoms prior to onset, the onset was confirmed with them. However, onset remains a difficult concept to quantify. Thus, wherever possible, alternative sources of information such as other members of the family, general practitioners, were used to confirm the time. The onset of symptoms was identified alongwith type of onset and period lapsed between the development of symptoms and help-seeking were identified. These data were then analysed using the WHO recommended norms (Jablensky *et al*, 1992) to categorise the onset as acute, acute on chronic or chronic.

4.5 SELF-ASCRPTION OF ETHNICITY

The 1991 census was the first census in the UK in which respondents were asked to describe their own ethnicity in one of nine categories. As discussed previously, the self-ascription of ethnicity remains fraught with difficulties. This is not an ideal solution but under the circumstances of the census was probably the best option. So that the denominator and the numerator would be directly comparable in this study of inception rates, the same self-ascription categories (as used by the OPCS) were employed for the sample in the present study.

The categories used are as follows: white, black Caribbean, black British, Indian, Pakistani, Bangladeshi, African, Chinese and other.

The reasons for collecting information on ethnicity were first to compare inception rates across various ethnic groups and secondly to identify whether these differences could be explained by social factors alone. By using uniform case definitions and case finding methodology as well as standardised (previously validated) tools for the clinical description of the patient populations in different settings the possibility of misdiagnosis can be minimised, especially if a one year follow-up is built in to observe changes in symptoms over time.

4.6 PPHS-FU SCHEDULE (JABLENSKY ET AL 1992)

This schedule was developed and used for the follow-up of the IPSS and the Determinants of Outcome Studies (WHO, 1973; Jablensky *et al*, 1992). The main purpose of this schedule is to give a picture of the course of the patient's illness in the interval between the initial evaluation and the follow-up. The schedule includes a section for a narrative account of the patient's course, including symptoms and treatment, and is followed by a series of pre-coded questions intended to give a picture of the number of episodes and types of remissions that have characterised the course of the patient's illness since the initial evaluation. Another section of the schedule provides a symptom checklist to indicate symptoms present at the initial episode (of inclusion) recorded after the previous psychiatric history schedule was completed and also the symptoms present in each subsequent episode. The remainder of the schedule includes questions about contacts with psychiatrists and health care services, other services and other socio-demographic factors which may well have affected symptoms and course of illness. The inter-rater reliability of the schedule is high (0.86; WHO, 1979). The WHO studies have used the follow up schedule on a monthly basis. In the present study follow-up was conducted one calendar year after the initial contact with the researcher. Where appropriate Hindi/Punjabi translations were used.

4.7 PROCEDURES

4.7.1 DENOMINATORS

Two districts in London were selected for study. Both Ealing and Camberwell have a sizeable proportion of minority ethnic groups.

4.7.1.1 Ealing

The London Borough of Ealing is coterminous with Ealing Health Authority, which has one psychiatric hospital for the whole catchment area. The total population of the London Borough of Ealing was reported to be 275,257 after the 1991 census. Whites constituted 67.7% of the population between 18-64, black Caribbean 4.4%, black African 1.6%, black other 1.1%, Indian 16.1%, Pakistani 2.7%, Bangladeshi 0.3%, Chinese 0.9% and other Asians 2.7% and others 2.6%. For the total population of Ealing 6.9% are aged 0-4, 13.1% are 5-15 years of age, 2.2% aged 16 and 17, and

22.1% are aged 18-29 and a further 22.9% between 30 and 44. Those between 45 and pensionable age constitute 17.5% of the population and over pensionable age constitute 15.3% of the population (all figures taken from OPCS data reported in OPCS County Monitor 1992). In Ealing, 86.6% of males and 69.9% of females aged 16-59 were economically active - a figure broadly similar to Southwark figures.

As the numbers of new onset psychoses in patients of Bangladeshi, Pakistan and Sri Lankan origin were expected to be small, it was decided to group these with the Indians and classify them as Asians (broadly representing the Indian subcontinent), although sometimes called South Asian the term Asian is retained in the present study for its simplicity.

4.7.1.2 Camberwell

Camberwell Health Authority (as was at the time of the study) is coterminous with the borough of Southwark. It was decided to focus on the South Southwark catchment area which is serviced by the Maudsley Hospital for recruitment of African-Caribbean patients of first onset. It was decided not to include white patients as several studies have previously ascertained these figures (WHO, 1973; Rwegellera, 1977; Castle *et al*, 1991, Wessely *et al*, 1991; Harvey *et al*, 1990).

The London Borough of Southwark had a total population of 218,541 at the time of the 1991 census (all figures taken from the OPCS County Monitor 1992) with whites constituting 75.6%, black Caribbeans 8.3%, black Africans 7.2%, black other 2.2%, those of Indian descent constituting 3.6%, Chinese 1.3%, other Asians 1.2% and others 1.7%. Overall, 84.6% of males and 67.1% of females were economically active. Nearly 70% of the population was between 18 and pensionable age. The total adjusted population in the catchment area of the Community Directorate of the Bethlem Royal Maudsley NHS Trust in 1991 was 211,917 of which 168,205 (79.3%) were white. African-Caribbeans constituted 13.9% of the population and Asians 5.7%. The catchment area includes South Southwark with 15 electoral wards and East Lambeth which consists of 9 electoral wards. The population data presented here have been obtained from the figures used by the purchasers and have been adjusted to include under-enumeration. There had been an overall under-enumeration in the younger age group when figures were compared with the 1991 census data. In the

whole area, those aged 0-4 formed 7.9% of the population. Those aged 5-15 were 12.5%, 16-17 were 1.9%, 18-29 were 23.5%, 30-44 were 21.7%, 45 up to pensionable age were 16.0% and over pensionable age were 16.5%. The overall age distribution in the two catchment areas was broadly similar.

4.7.2 THE DENOMINATOR

The denominator was calculated by pooling data from the small-area statistics electoral ward population units for both study districts. All figures used to calculate incidence rates were derived from these data.

An additional problem of calculating the denominator was that of reported under-enumeration of young males especially those from ethnic minorities and more specifically black Caribbeans. This under-enumeration is difficult to assess accurately but it was decided to follow the guidelines recommended by the OPCS in their Census Users Guide (OPCS, 1991) to calculate an adjusted denominator which has been used for all the inception rate calculations. Using 1981 census and estimated population OPCS (1991) reported that under-enumeration of adult population was 869 thousand residents in the country.

They had identified main causes of error in the under-enumeration. They reached 98% coverage and estimated that under-enumeration ranged from zero in people aged 45 to 75 to around 9% for young men in their twenties. This was reported to be higher in inner London. OPCS (1991) recommended a formula as follows:

if C_{easg} = count for ethnic group e, age a, sex s in geographical area g
and F_{esg} = adjustment factor for age a, sex s and geographical area g

then adjusted count $C_{easg} = F_{esg} \cdot C_{easg}$

Summing C_{easg} over age and sex and dividing by the sum of the original counts gives adjustment factor F_{esg} for ethnic group e, sex s and area g:

$$F_{esg} = \frac{\sum_a C_{esag}}{\sum_a C_{easg}}$$

Using these formulae ready made tables are available to take into account levels of under-enumeration and correct for them.

A further problem that emerged was that of classifying patients with mixed ethnic parentage. As the patients had been asked to self-ascribe their ethnicity, individuals who saw themselves as clearly mixed race were excluded from the final data analysis. Two patients of mixed race who had assigned themselves to the black group were included in the final calculation.

4.7.3 NUMERATOR

Uncertain classes are combined with the relevant more certain classes - e.g. P? is combined with P+. The profiles are shown for each ethnic group separately, highlighting the S+ and broad S syndromes (which includes S+, P+, O+, S? and P?).

4.7.4 INCIDENCE RATES

Incidence rates were calculated using age standardisation as well as narrow age bands. Age standardisation is, of course, widely used and recommended. However, as age standardisation will adjust simultaneously for the numerator and the denominator, and as the data revealed a higher age of onset in Asian females, these differences may be masked with age-standardisation. The data were also analysed by splitting the age range into four groups - the findings were the same but some of the cell sizes were too small for rates to be calculated in a meaningful manner. Rates were also calculated on the basis of broad versus narrow schizophrenia but as these did not show any significant ethnic differences no further analysis has been carried out.

4.7.5 STATISTICAL ANALYSIS

The screening and case finding procedures led to identification of a clear number of cases meeting PSE-CATEGO diagnostic definition. Inception rates for narrow (CATEGO class S+) and 'broad' diagnostic definitions (S, P and O) were calculated for each ethnic group.

4.7.6 FOLLOW-UP DATA

The patients were monitored for a calendar year. If a recurrence of psychotic symptoms was suspected a repeat PSE was carried out when possible. If it was not

possible, relevant information was collected from the patients' case notes, their GPs or other sources to rate the Syndrome Check List (SCL). Patients and when possible relatives were administered the schedule at one year. The contribution of various factors to the relapse rate was analysed by linear logistic modelling with the GLIM program (Numerical Algorithms Group, 1986). The data pertaining to outcome are presented in this study.

4.7.7 EFFECTIVENESS OF CASE-FINDING METHODS

Deciding what constitutes the 'true' incidence of schizophrenia is bound to involve a good deal of arbitrariness as a pathophysiological measure of disease onset is not available. In the absence of such a marker, the ascertainment of onset on the basis of clinical history will be unreliable in a substantial proportion of cases in which the early manifestations of the disorder represent a gradual accentuation of long-standing impairments or of premorbid personality traits (Jablensky *et al*, 1992). The method of first in lifetime contact employed in this study comes close to the first admission method and represents an extension of this technique to non-hospital facilities. It is conceptually similar to the 'first ever contact' method of determining disease inception outlined by Wing and Fryers (1976) as a part of a technique used in case register studies. There is obviously a possibility that not all schizophrenia cases will establish contact with psychiatric facilities and will, therefore, be missed, but there is no evidence to suggest that in urban areas this is anything other than very rare. Thus one can be reasonably sure that all potential cases have been included in the numerator especially if all possible sources for such cases have been screened and included. Furthermore, as all patients over the second year were screened it appeared that among all ethnic groups no potential case where the onset had been in the previous year had been missed. Secondly as the numbers of new cases were broadly similar it suggests that the population was stable and the rates were broadly similar in two years.

4.7.8 SOCIAL FACTORS

Chi-square tests were used to determine which socio-demographic variables were statistically significantly associated with case status. The significance level was set at the conventional probability level of 0.05 and Yates' correction used for 2×2 tables where appropriate.

5. RESULTS

5.1 SAMPLE SELECTION

In the two years of the study 1,855 admissions in Ealing were screened along with all contacts, whether new or old, with all the community mental health resource centres. Over the same period in the South Southwark area all admissions and community contacts (1,645 admissions and 12,485 community contacts) were screened including Brixton and Belmarsh prisons to which monthly contacts were made.

5.2 SAMPLE

All first contacts were approached and enquiries made of their presenting symptoms and then where appropriate the health care professionals were asked to confirm these symptoms and screening proforma filled. The individuals were then asked to provide a brief history of their previous contact with services. Only then individuals went through to the next stage of assessment. One hundred and twenty-three cases passed the psychosis screen. As the specificity or sensitivity of the screen is not in question, all these patients were included.

Of the total 123 cases passing the psychosis screen, 46 were whites, 38 African-Caribbeans and 31 Asians (see Figure 5.1). The rest were African. Of these all whites and all Asians were from Ealing catchment area and 19 African-Caribbeans were from Ealing and the rest were from the South Southwark catchment area. Other ethnic groups were excluded from further assessment. Of the 123 patients six were not admitted and were treated on a domiciliary basis. Two patients were admitted subsequently.

	White (%)	Asian	African-Caribbean	df	X ²	p
Total	38	24	38			
Male	26 (68.4)	11 (45.8)	28 (73.7)			
Female	12 (31.6)	13 (54.2)	10 (26.3)	2	5.33	>0.05
Age 18-29	21 (55.3)	6 (25.0)	26 (68.4)			
30-64	17 (44.7)	18 (75.0)	12 (31.6)	2	11.26	>0.004
Married	6 (15.8)	12 (50.0)	5 (13.2)			
Single/div/wid	32 (84.2)	12 (50.0)	33 (86.8)	2	13.07	<0.001
Unemployed	21 (55.3)	12 (50.0)	31 (81.6)			
Employed	12 (31.6)	5 (20.8)	5 (13.2)			
Student/h.wife	5 (13.2)	7 (29.2)	2 (5.3)	4	12.01	<0.017
Born in UK	35 (92.1)	3 (12.5)	27 (71.1)			
Born elsewhere	3 (7.9)	21 (87.5)	11 (29.0)	2	41.96	<0.001
1ry or 2ry educ	33 (86.8)	19 (79.2)	31 (81.6)			
3ry education	5 (13.2)	5 (20.8)	7 (18.4)	2	0.70	>0.1
Living alone	10 (26.3)	3 (12.5)	13 (34.2)			
Living with family	28 (73.7)	21 (87.5)	25 (65.8)	2	3.61	>0.1

Table 5.1 Socio-demographic data for patients with schizophrenia

The data presented often have incomplete responses - the percentages in brackets are derived from the completed responses rather than the total sample and are shown as such as part of the presentation of results.

The PSE was carried out within the first week of contact in 84 patients whereas for the rest the Syndrome Check List (SCL) was completed. In one case, only the behavioural section could be completed in the first instance, and PSE was completed two weeks later (a total of 85 patients had completed PSEs). There were no socio-demographic differences between the two groups (those who had PSE assessment and those for whom the SCL was completed) so the findings are presented for the whole group. As one of the aims of the study is to establish inception rates of schizophrenia and 100 Of the 123 cases were identified as having schizophrenia according to the CATEGO classification, findings from these cases are presented here. Of the 38

African-Caribbean patients, 19 were recruited from South Southwark and 19 from Ealing. There were no socio-demographic differences between these two groups.

Basic socio-demographic data across the three ethnic groups are presented in Table 5.1. Details of these social factors are presented later. For three of these factors, the white and the African-Caribbean patients resembled each other closely whereas the Asians stood out as different. Specifically the Asians had a preponderance of people over the age of 30, a great majority of them had been born abroad and a half of them were married; the relevant proportions were smaller in the other two ethnic groups. One exception is unemployment which affects a much higher proportion of the African-Caribbean patients compared to other two groups, which are very similar.

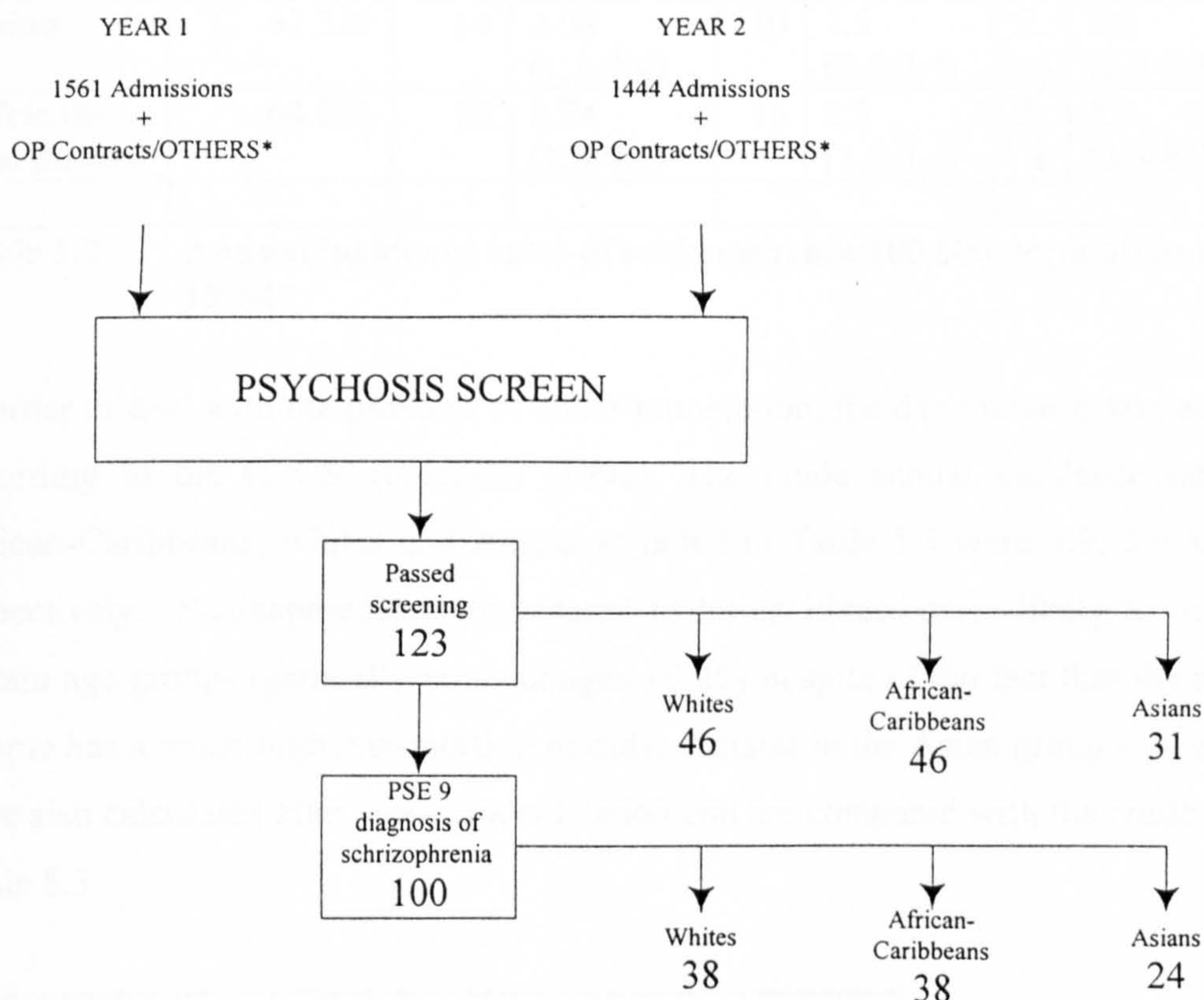


Figure 5.1 Screening Procedures

5.3 PRIMARY HYPOTHESES (H₁, H₂ AND H₃)

5.3.1 INCEPTION RATES

The inception rates per 10,000 population aged 18-64 are shown in Table 5.2 for S+, non-S and broad schizophrenia by age and sex. The White population base was adjusted according to the OPCS recommendations as well as taking into account that the data for the two minority ethnic groups were collected over two years. This table addresses the two primary hypotheses (H₁ and H₂) of the study.

Group	Pop base (adjusted)	n	S+ Rate (95% CI)	N	Non S+ Rate (95%CI)	n	Broad S Rate (95%)
White	124,776	26	2.08 (1.2-2.8)	12	0.9 (0.4-1.4)	3 8	3.0 (1.9-3.8)
Asian	67,338	14	2.08 (1.1-3.4)	10	1.5 (0.5-2.4)	2 4	3.6 (2.2-5.1)
African-Caribbean	64,892	23	3.54 (1.6-4.2)	15	2.3 (1.0-3.4)	3 8	5.9 (3.3-6.7)

Table 5.2 Annual incidence rates of schizophrenia/100,000 population aged 18-64

In order to deal with the problem of under-numeration, the denominator was adjusted according to the OPCS guidelines (1991). The crude annual incidence rates for African-Caribbeans, whites and Asians as noted in Table 5.3 were 5.9, 3.0 and 3.6 respectively. Schizophrenia is considered to be an illness more likely to occur in certain age groups (generally younger ages 18-29) in spite of the fact that the present sample has a much higher proportion of older females in the Asian group - these rates were also calculated after age-standardisation and are compared with the crude rate in Table 5.3

	Crude Rate	Age standardised
White	3.0	2.9
Asian	3.6	3.7
African-Caribbean	5.9	5.1

Table 5.3 Annual crude incidence rates per 10,000 population aged 18-64

Rate ratios and their 95% confidence intervals for the age standardisation rates were: African-Caribbean:white 1.7 (1.11-2.78); African-Caribbean: Asian 1.38 (0.81-2.33);

Asian:white 1.28 (0.76-2.14). This indicates that the only significant difference lies between the African-Caribbean and the white group. The previously reported rates of schizophrenia among whites in South Southwark using the case register are 2.5 per 100,000 according to the ICD diagnosis (broadly similar to S+ schizophrenia according to the CATEGO program (Castle et al 1991) a figure not dissimilar to the Ealing figure.

Table 5.4 shows age and sex specific rates in two broad age groups, along with the number of cases as well as the population base used to calculate the rates. These numbers were analysed by linear logistic modelling using the GLIM program. After allowing for age and sex, there was a significant difference due to ethnic group ($G^2=7.88$, $df=2$, $p<0.02$).

Overall comparisons of the Asian and white groups may be misleading because the Asians have relatively higher rates for the older age group and for women. In the logistic modelling this is reflected in significant interactive effects of ethnic group and age ($G^2 = 8.42$, $df=2$, $p<0.02$) and of ethnic group and sex ($G^2 = 6.92$, $df=2$, $p<0.03$).

	Males		Females	
Rate per 10,000	18-29	30-64	18-29	30-64
Number of cases				
Population base				
African-Caribbean	14.7 18 12285	5.9 10 16933	5.4 8 14768	1.0 2 20831
White	7.5 16 21468	2.5 10 40605	2.3 5 22094	1.7 7 40600
Asian	2.6 3 11755	3.6 8 22536	2.6 3 11553	4.6 10 21922

Table 5.4 Age- and sex-specific rates of schizophrenia

As can be seen from Table 5.4, the rate for the African-Caribbeans is roughly twice that of the white group within three of the four age and sex subgroups and this is consistent with the overall rate ratio.

Thus the first primary hypothesis (H1) is partly upheld in that the inception rates among Asians are not lower than those of whites but are lower than those among the African-Caribbeans. The second primary hypothesis (H2) is upheld in that the inception rates of schizophrenia among the African-Caribbeans are higher than the rates for the whites.

5.3.2 OUTCOME (HYPOTHESIS H₃)

Outcome was defined according to the WHO criteria (WHO, 1973; Jablensky *et al*, 1992). Outcome needs to be differentiated from the course of schizophrenia, as noted in the literature review. Outcome in this study is related to one year follow-up only. Poor outcome or relapse was defined as: the recurrence of psychotic symptoms in patients whose psychosis had resolved completely; the exacerbation of persisting psychotic symptoms; or the persistence of psychotic symptoms without any remission. These, along with those who had committed suicide, were included in the poor outcome group. The Asian group had one case of suicide whereas the African-Caribbean group had two and the white group did not have any. The figures are shown in Table 5.35.

Ethnic group	N	Poor outcome
White	38	9 (24%)
Asian	24	4 (17%)
African-Caribbean	35*	21 (60%)
Relapse, still in episode of conclusion, or suicide		
* three patients untraced		

Table 5.5 One year outcome for patients with schizophrenia

In the African-Caribbean group three patients were untraced and have been excluded from the final analysis. Their GPs did not have any information on them and they had not kept any follow-up appointments; the clinical teams looking after them had no information on their whereabouts or their current mental state. It was not possible to assess clinical outcome blind to ethnicity.

A linear logistic analysis of the outcome data was carried out using the GLIM program. Good versus poor outcome was the dependent variable. Independent

variables tested were ethnicity, narrow versus broad (S+ vs. non-S) schizophrenia, gender and unemployment.

Ethnicity was found to have the biggest effect ($G^2=15.33$ $df=2$ $p<0.0005^{**}$). Unemployment had a significant effect when taken alone but this effect disappeared after ethnicity was allowed for. Only gender still had a significant effect once ethnicity was allowed for, men having a worse outcome ($G^2=4.1$ $df=2$ $p<0.05^*$).

5.4 SOCIAL FACTORS

As discussed in the literature review, several social factors are associated with differences in the inception rates of schizophrenia. Some of these are described in this section. The key socio-demographic factors are age and gender.

Table 5.6 illustrates the age and sex distribution of patients across the three ethnic groups. Among the Asian group, one quarter were presenting for the first time over the age of 50.

		Total	White	Asian	African-Caribbean
Male		65	25 (65)	12 (50)	28 (73)
Female		35	13 (35)	12 (50)	10 (27)
Age	18-29 yrs	53	21 (55)	6 (25)	26 (68)
	30-39 yrs	26	7 (18)	7 (29)	12 (32)
	40-49 yrs	13	8 (21)	5 (21)	0
	50-59 yrs	7	1 (2.6)	6 (25)	0
	60-64 yrs	1	1 (2.6)	0	0

Table 5.6 Age and sex distribution across ethnic groups

Mean age for the whole sample was 29.81 years (SD 10.27) whereas for the white sample mean age was 29.184 years (SD 9.17). For African-Caribbeans the mean age was 25.52 (SD 5.8 20) whereas for Asians it was 37.58 (SD 13.04) years.

For white males the mean age was 28.84 (SD 9.79), for Asian males it was 34.66 (SD 10.43) and African-Caribbean males it was 25.25 (SD 5.63). Mean age for white females was 29.91 (SD 8.00) compared with 26.18 (SD 6.49) for African-Caribbean females and highest for Asian females at 40.50 (SD 15.11) years.

When the patient sample in the present study was compared with the general population on area of birth, 53% of the African-Caribbean population was born in the UK compared with 71% of the patient sample, while among the Asian population, the average was around 20%, compared with 12.5% in the Asian patient sample in the present study.

The proportions of people in the general population under 60 living alone, which are the only figures available in the most recent survey (Modood *et al.* 1997) were 11% of whites, 14% of Caribbeans and 4% Asian compared with 26%, 34% and 12%, respectively, in the present study.

The rest of the data on social factors are presented according to the WHO convention of presenting data from the PPHS.

Basic social factors like place of birth, unemployment, living alone, marital status and whether student or housewife in the patient sample are compared with the figures from the general population from the OPCS guides (ONS 1996) and are shown as ratios in Table 5.7. In both the Asian sample and the population a high proportion of subjects were married although the patients were marginally less likely to be so.

These data suggest that African-Caribbean patients were less likely to be students than the other two groups and were as likely to be born in the UK as the general population but Asians were less likely to be born in the UK for both the patient and the general population.

	White (%)	African-Caribbean (%)	Asian (%)
Unemployment			
Patients	55.3	81.6	50.0
Gen Pop	11.6	21.9	15.5
Ratio	4.8	3.7	3.2
Born in the UK			
Patients	92.1	71.1	42.5
Gen Pop	83.4	60.0	40.6
Ratio	1.1	1.2	1.05
Living alone			
Patients	26.3	34.2	12.5
Gen Pop	20.0	24.0	8.0
Ratio	1.3	1.4	1.6
Marital status (Married)			
Patients	15.8	13.2	50.0
Gen Pop	49.8	33.7	67.7
Ratio	0.3	0.7	0.7
Student/Housewife			
Patients	13.2	5.3	29.2
Gen Pop	36.4	28.6	34.6
Ratio	0.36	0.19	0.84

Table 5.7 Socio-demographic variables compared with the base population

5.4.1 ALCOHOL AND DRUG ABUSE

The PPHS includes a series of questions about the patients suspected and actual drug usage. The informants were asked about the drinking habits of the patients, especially in relation to family tension, job difficulties etc., and whether the patient had received any treatment for an alcohol problem in the past. These findings are shown in Table 5.8. When abstainers were compared with the rest chi-square value was 1.98 (df=2, p=0.370). No significant differences emerged when those receiving treatment for alcohol were compared across three ethnic groups

	White	Asian	African-Caribbean
N	34	22	32
None	11 (32.3)	11 (50)	11 (34)
Occasional	12 (35.2)	7 (31.8)	14 (43.7)
Moderate	9 (26.4)	2 (9)	2 (5.8)
Serious	0	2 (9)	3 (9.3)
Clear use	2 (5.8)	0	2 (5.8)
No statistically significant differences noted (chi-square)			

Table 5.8 Alcohol problems

They were also asked about drug use in the previous year. Table 5.9 illustrates comparisons between drug not taken and the rest, as well as repeating this comparison after excluding those suspected of taking drugs by the informants.

	White	Asian	African-Caribbean	x ²	p
N	32	20	33		
1.Not taken	19 (59.3)	17 (85)	16 (48.4)	7.06	0.029* ¹
2.Suspects	4 (12.5)	1 (5)	2 (6)		
3.Sporadic up to 3-4 times/yr	4 (12.5)	0	2 (6)	7.63	0.02* ²
4.Sporadic but ?more frequent	0	1 (5)	5 (15.1)		
5.>5 times in total	5 (15.6)	1 (5)	8 (24.2)		
* ¹ Comparison of 'not taken' vs. 'taken' (category 1 vs. 2+3+4+5)					
* ² Excluding suspected and comparing 'taking' vs. 'not taken' (category 1 vs. 3+4+5)					

Table 5.9 Drug abuse as reported by relatives

The low rates of drug use by the Asian patients are remarkable. The informants seemed very sure of non-usage in more than four-fifth of the sample. Table 5.10 shows the types of drugs the patients were said to have used as identified by the informants. The numbers are generally too small for statistical comparisons, although when figures were compared for cannabis, no statistically significant differences emerged.

	White	Asian	African-Caribbean
Morphine/Heroin	1 (5)	0	1 (4.7)
Opium	0	0	1 (3.5)
Amphetamines	2 (9)	2 (25)	1 (3.5)
Cannabis	10 (43.4)	3 (33)	15 (51.7)
Hallucinogens	1 (5.2)	0	1 (3.5)
Cocaine	0	1 (12.5)	2 (7.4)
Tranquillisers	0	1 (12.5)	1 (4.1)
Other	3 (15)	0	0

Table 5.10 Drugs taken (as reported by the informants)

When opiates and other drugs usage was compared with cannabis usage no significant differences emerged (x²=1.48, df=2, p=(0.477).

5.4.2 FORENSIC HISTORY

Among those for whom a forensic history was available, 10 whites had been arrested (32.2%) compared with 14 (41.7%) African-Caribbeans and only 2 Asians (9.5%). On comparing history of arrest marginally significant results emerged ($\chi^2=6.26$, $df=2$, $p=0.04^*$).

Seven African-Caribbeans (20.5%) and 4 whites (14.2%) had been detained in an institution compared with only one Asian ($\chi^2=2.45$, $df=2$, $p=0.293$). African-Caribbeans were also more likely to be on probation - 6 (17.6%) compared with 2 whites (7.4%) and no Asians ($\chi^2=4.68$, $df=2$, $p=0.09$).

5.4.3 EMPLOYMENT

Employment status of the patients as identified by the informants is shown in Table 5.11. As noted earlier the African-Caribbean patients were more likely to be unemployed when compared with the other two groups but the ratio between the patients in the three groups and the general population was broadly similar as previously illustrated in Table 5.7.

	White	Asian	African-Caribbean
	N=38	n=24	n=38
Unemployed	22 (58)	10 (42)	31 (82)
Student	2 (5)	3 (12)	2 (5)
Retired	0	3 (12)	0
Housewife	2 (5)	4 (17)	0
Unskilled emp by others	0	1 (4)	0
Manager emp by other	1(2.5)	0	0
Skilled emp home	1(2.5)	0	1(2.5)
Skilled emp by others	9(23)	1(4)	3(7.5)
Professional own business	1(2.5)	1(4)	0
Professional emp by others	0	1 (4)	1 (3)

Table 5.11 Employment status

When chi-square was carried out on the whole set of findings statistically significant results emerged (35.470, df=18, p=0.008**). When unemployed subjects were compared with the rest, highly statistically significant differences emerged (chi-sq = 10.74, df=2, p 0.004**).

Reasons for unemployment as offered by the informants were mental illness and physical disability. African-Caribbeans (33%; 6 out of 19) were more likely to give the general employment situation as a possible reason for unemployment African-Caribbeans were also more likely (37%, 7 out of 19)to offer their mental state as a possible cause for their unemployment compared with 2 (18%) of Asians. The general employment situation was given as a possible cause by 4 (19%) whites and 6 (33%) African-Caribbeans. No Asians offered this explanation for their unemployment. Three Asians (18%) and two whites (9%) gave physical disability as a cause for their unemployment whereas no African-Caribbeans did so. Seven whites (33%), six Asians (54%) and six African-Caribbeans gave other causes as possible explanations for their unemployment. Two whites (9%), four Asians (36%) and four African-Caribbeans gave a combination of reasons for their unemployment (chi-square=13.942, df=8, p=0.08*). Three whites (9%), 7 (21%) African-Caribbeans and two Asians (9%) acknowledged that there had been some changes in their social status as a result of their unemployment.

5.4.4. EDUCATIONAL STATUS

Educational achievements in the three groups are shown in Table 5.12. Chi-square analysis was 16.936, df=8, p<0.03* although numbers in individual cells were small. As education was one of the social factors linked with inception rates all primary school educated were pooled together (as these were taken as lowest educated) and these were then compared with the rest of the chi-square was 39.86, df=2, p<0000**.

	White	Asian	African-Caribbean
No certs	1 (2.6)	1 (4.1)	0
Primary	3 (7.8)	5 (20.8)	0
Secondary	26 (68.9)	15 (62.5)	29 (76.3)
Vocational	5 (13.1)	0 (0)	8 (21)
Tertiary	3 (7.8)	3 (12.5)	1 (2.6)

Table 5.12 Detailed educational achievements

5.4.5 PLACE OF BIRTH

Of 38 whites, 34 were born in the UK and 4 elsewhere, whereas 27 African-Caribbeans were born in the UK and the rest in the Caribbean. Of 24 Asians, only 4 were born in the UK, 12 were born in India and the rest elsewhere (largely East Africa). Differences between patients born in the UK and those born abroad are statistically significant (chi-square 35.26, df=2 and $p < 0.000002^{**}$).

5.4.6 RELIGIOUS AFFILIATION

Religious affiliation and current degree of religious activity are shown in Tables 5.13 and 5.14 respectively. These differences in the religious affiliation were highly significant (chi-square 95.982, df=16 and $p < 0.0000^{**}$).

Of 36 whites, none acknowledged a change in their religious activity compared with 6 out of 22 Asians and 6 out of 36 African-Caribbeans. This change was either an increase or a decrease. Of these, five Asians and five African-Caribbeans were more likely to show an increase in their religious activity.

	White	Asian	African-Caribbean
Church of England	7 (24.1)	1 (4.5)	6 (18.1)
Roman Catholic	13 (44.8)	0	6 (18.1)
Methodist	1 (3.4)	0	4 (12.1)
Baptist	3 (10.3)	0	0
Other Protest	3 (10.3)	0	6 (18.1)
Hindu	0	9 (40.9)	0
Muslim	0	3 (13.6)	1 (3)
Sikh	0	9 (40.9)	0
Other	5 (17.2)	0	10 (30.3)

Table 5.13 Religious affiliation

	White	Asian	African-Caribbean
More Religious	0	5 (23)	5 (14)
No change	36 (100)	17 (77)	31 (86)
$x^2=8.067, df=2, p < 0.01^*$			

Table 5.14 Changes in religious activity

5.4.7 HOUSING

Of whites, 20 (57.1%) were owner occupiers compared with 13 (65%) Asians and 12 (34%) African-Caribbeans. The rest were in accommodation which was rented from different sources. Among the whites 10 (66%) were renting privately, 4 (26%) from the Council, and one from a Housing Association, whereas among the Asians these figures were 2 (28%), 4 (57%) and 1 (14%), respectively. In addition to one African-Caribbean living with her family, 3 (12%) were in privately rented accommodation, 18 (75%) in local authority accommodation and 2 (8%) in housing association property ($\chi^2=12.385$, $df=2$, $p=0.01^*$). Thus the African-Caribbeans were more likely to be living in local authority accommodation compared with the other two groups.

5.4.8 LIVING ALONE AND SOCIAL SUPPORT

Among the whites, 10 (26%) lived alone compared with 3 (12%) Asians and 13 (34%) African-Caribbeans. At the other extreme, 12 whites (34%) lived in households with four or more members, compared with 11 (28%) African-Caribbeans and 13 (59%) Asians. There were no statistically significant differences overall in these groups. When those living alone were compared with those living with others, the chi-square value was 21.76, $df=2$, $p<0.00001^{**}$.

The details of marital status are shown in Table 5.15. As mentioned previously the Asians were more likely to be married than the other two groups.

Among whites the role in the household was reported to be that of spouse in 5, as child in 17, single parent in 7 and co-resident or with siblings in 6 patients. Among Asians, these figures were 13, 5, 2 and 2, respectively, whereas among African-Caribbeans these were 4, 16, 14 and 4, respectively. Thus the last group were twice as likely to be single parents compared with whites.

	White	Asian	African-Caribbean
N	36	24	33
Married	4(11%)	13(54%)	1(3%)
Single (cohabiting)	1(3%)	1(4%)	2(6%)
Single	28(77%)	6(25%)	28(84%)
Single-casual	1(3)	1(4)	2(6)
Divorced	2(6%)	2(8%)	1(3%)
Widowed	0	1(4)	0
Separated	1(3%)		1(3%)
$\chi^2=39.086, df=12, p<0.0001$			

Table 5.15 Relationship status across the three groups

The patients and their relatives were asked whether the patient had been separated from either or both the parents, the possibility being that individuals migrating were less likely to bring their children over at the same time and this may well be related to later life adjustment.

Table 5.16 illustrates the number of patients in each group who had been separated from either of their parents. Separation from the father differed significantly across the three ethnic groups (chi-square=8.607, df=2, p<01*).

	White	Asian	African-Caribbean	
Mother				
Yes	6 (17.1)	3 (14)	12 (34.2)	$\chi^2=3.77$
No	29 (82.8)	18 (85.7)	23 (65.7)	df=2
				p=0.152
Father				
Yes	12 (34.2)	3 (14.2)	19 (52.7)	$\chi^2=8.61$
No	23 (65.7)	18 (85.7)	17 (47.2)	df=2
				p=0.013*

Table 5.16 Separated from mother/father

When looking at the duration of separation it emerged that among whites three patients were separated from their mother for more than 4 years compared with 2 in the Asian group and 10 African-Caribbean patients. Three whites were separated for less than 1 year compared with no Asians and only 1 African-Caribbean. One African-Caribbean and one Asian were separated for between 2 and 4 years.

The trends were broadly similar when length of separation from father was ascertained. Nine white and two Asian subjects were separated for more than 4 years whereas all African-Caribbeans who had been separated had a separation longer than 4 years. Three whites and two Asian patients were separated for less than 4 years.

In the overall sample (combining all three groups) when those living alone were compared with those living with others in terms of separation, significant differences emerged for separation from father, but in the African-Caribbean group only where separated from mother (see Tables 5.17 and 5.18, respectively).

	Separated	Not separated
Living alone	12	8
Not living alone	22	50
$\chi^2 = 5.824$ $df = 1$ $p < 0.01^*$		

Table 5.17 Separation from father and current living condition in all groups

	Separated	Not separated
Living alone	6	4
Not living alone	6	19
$\chi^2 = 4.108$ $df = 1$ $p < 0.05^*$		

Table 5.18 Living alone and separation from mother in African-Caribbean group

It is also possible that having others from the family around may provide an element of support. Data on sharing the problem with others and having close confidants are shown in Tables 5.19 and 5.20 respectively.

	White	Asian	African-Caribbean
See/Speak			
Weekly	20 (83%)	11 (84%)	18 (81%)
Fortnightly	3 (12%)	1 (8%)	2 (9%)
Monthly	1 (5%)	1 (8%)	2 (9%)

Table 5.19 Primary contact

Those with weekly contact were compared with the other two groups combined because weekly contact may show an evidence of involvement and support whereas lesser contact may not prove to be as supportive. The chi-square value was 0.05, $df=2$

and $p=0.97$ - thus no significant differences emerged. When problem sharing with partner and family were combined to compare these with problem sharing with friends no significant differences emerged ($\chi^2=1.32$, $df=2$, $p=0.517$).

	White	Asian	African-Caribbean
Partner	6 (16.6)	5 (26.3)	3 (10)
Family	16 (44.4)	7 (36.8)	11 (36.6)
Female friend	2 (5.5)	1 (5.2)	7 (23.3)
Male friend	5 (13.8)	3 (15.7)	2 (6.6)
No one in particular	3 (8.3)	1 (5.2)	2 (6.6)

Table 5.20 Problem sharing with others

In order to determine the level of contact with the family and the confidant, the relatives were asked to identify the primary contact of the patient and the frequency of such contact.

Among the whites, 16 (67%) of patients' families lived locally and 6 (25%) in the same town compared with only 2 living far away. For Asians these figures were 10 (77%) and 3 (23%) respectively with no one living far away. For African-Caribbeans 17 (74%) families lived locally and another 4 (17%) in the same town and 2 (9%) lived far away ($\chi^2=4.738$, $df=4$, $p=0.315$). When asked whether they shared their problems with anyone, 4 (11%) whites, 2 (15%) Asians and 5 (17%) African-Caribbeans said they did not do so. The rest shared these with others, such friends or families.

When asked about the presence of a close confidant, 25 whites (69%), 11 Asians (73%) and 17 African-Caribbeans (59%) acknowledged this.

In summary, in this section data relating to social support and contacts have been presented. Thus living alone, not having regular contact with the family and possible increase in religious activity as well as unemployment emerge as possible factors associated with the inception rates of schizophrenia.

5.5 CONCEPTUALISATION OF PATIENT'S CURRENT PROBLEM

A range of questions in the PPHS cover the ways the patients and their relatives view the problem which has led them to seek help.

5.5.1 SYNDROMAL FEATURES

Syndrome profiles of the main CATEGO classes are presented in tabular form to provide easy comparisons in Tables 5.21 and 5.22. Class S+ contains the central schizophrenic conditions. The characteristic symptoms are - thought insertion, thought broadcast or withdrawal, delusions of control and voices discussing patients in third person or commenting on thought or actions, other auditory hallucinations (non-affective) and other delusions. Of the total 38 white patients, 12 (31%) were classified as having non-S schizophrenia compared with 15 of the 38 African-Caribbeans (39%) and 10 of the 24 Asians (42%).

	White	Asian	African-Caribbean	df	x2	p
N	26	14	23			
Delusions:						
of reference	14 (54)	9 (64)	21 (91)	2	8.39	0.01*
of persecution	11 (42)	5 (36)	7 (30)	2	0.75	0.688
Sexual / fantastic	13 (50)	5 (36)	14 (60)	2	2.21	0.33
Religious	5 (19)	1 (7)	5 (22)	2	1.38	0.500
Hallucinations:						
Auditory	10 (38)	8 (57)	10 (43)	2	1.30	0.522
Olfactory	6 (23)	1 (7)	7 (30)	2	2.75	0.252
Visual	8 (31)	6 (43)	0	2	11.12	0.003*
Tension	12 (46)	5 (36)	8 (35)	2	1.30	0.522
Worrying	22 (85)	9 (64)	13 (56)	2	0.78	0.677
Irritability	12 (46)	9 (64)	13 (58)	2	1.30	0.522
Hysteria	0	8 (57)	0	2	32.07	0.000*
Simple depression	11 (42)	5 (36)	8 (35)	2	0.34	0.845

Table 5.21 Comparison of symptoms in the S+ cases in three groups (% for the whole group)

Among the S+ cases, delusions of reference were significantly more common in the African-Caribbean patients whereas visual hallucinations were not reported at all in this group and the syndrome of hysteria was reported only in the Asian patient group.

Table 5.22 highlights symptoms across the three ethnic groups in the non-S cases showing significant differences in two symptoms--simple depression and tension both of which were commoner in the African-Caribbean patients.

	White	Asian	African-Caribbean	df	x ²	p
N	12	10	15			
Delusions:						
Of reference	4 (33)	3 (30)	6 (40)	2	0.29	0.865
Of persecution	4 (33)	3 (30)	5 (33)	2	0.04	0.981
Sexual/fantastic	6 (50)	2(20)	4 (27)	2	2.62	0.269
Religious	2 (16)	0	0	2	4.40	0.110
Hallucinations:						
Auditory	3 (25)	1 (10)	1 (8)	2	2.06	0.356
Olfactory	0	0	0			
Visual	0	0	0			
Non-specific	3 (25)	0	3 (20)	2	2.78	0.249
Tension	0	0	4 (27)	2	6.58	0.03*
Worrying	5 (42)	2 (20)	8 (54)	2	2.78	0.249
Irritability	5 (42)	6 (60)	5 (33)	2	1.76	0.415
Hysteria	0	0	0			
Simple depression	0	1(10)	5 (33)	2	5.84	0.05*

Table 5.22 Comparison of symptoms in the non-S cases in the three groups (% for the whole group)

5.5.2 CONTACT WITH SERVICES

The reasons for initial contact are shown in Table 5.23. These are the reasons put forward by the informants. The Asians were most likely to be seen to be a danger to themselves and the African-Caribbeans least likely to be seen to be a danger to themselves.

	White	Asian	African-Caribbean	df	x ²	p
N	35	22	35			
Suicide attempt	7 (20)	2 (9)	2 (6)	2	3.62	0.163
Danger to self	17 (48)	12 (54)	7 (20)	2	8.88	0.011*
Committed assault	8 (23)	7 (33)	8 (23)	2	0.75	0.698
Threat	16 (46)	11 (50)	20 (57)	2	0.93	0.628
Odd behaviour	32 (94)	19 (86)	28 (77)	2	1.89	0.388
Crisis	3 (8)	2 (9)	5 (14)	2	0.68	0.700
Physical illness	2 (6)	0	1 (3)	2	1.43	0.489
Requested admission	2 (6)	0	2 (6)	2	1.31	0.518
Other reasons	3 (17)	4 (22)	2 (6.5)	2	2.47	0.29

Table 5.23 Reasons for contact across the three ethnic groups

The relatives or other informants were able to not only identify the reason but also the earliest manifestations of the symptoms which led to the patient seeking help. These early manifestations of abnormality as identified by the informants are shown in Table 5.24.

	White	Asian	African-Caribbean	df	x ²	p
N	31	18	29			
Neglect of activities	16 (52)	13 (72)	18 (62)	2	2.08	0.352
Avoid company	12 (39)	6 (37)	15 (51)	2	132	0.516.
Lose all interest	12 (37)	4 (31)	14 (45)	2	0.88	0.642
Lose appetite	20 (61)	16 (89)	13 (43)	2	9.7	0.007*
Excited	6 (20)	2 (15)	2 (8)	2	1.57	0.455
Assaulted others	5 (6)	6 (37)	9 (32)	2	3.15	0.207
Attempt to kill self	6 (20)	6 (33)	3 (12)	2	3.13	0.209
Cause damage	8 (24)	2 (13)	3 (11)	2	1.85	0.395
Go away	2 (6)	3 (23)	2 (8)	2	2.98	0.225
Spend time in Church	0	5 (36)	5 (19)	2	10.57	0.004*
Irritable	9 (28)	9 (56)	12 (43)	2	3.74	0.153
Spend money	5 (17)	2 (15)	5 (20)	2	0.16	0.922
Inappropriate behav	6 (19)	8 (50)	7 (26)	2	5.00	0.08
Incomprehensible talk	9 (29)	6 (46)	9 (32)	2	1.24	0.538
Behave as if 'voices'	14 (44)	15 (83)	17 (57)	2	7.40	0.02*
Being persecuted	15 (48)	11 (69)	21 (66)	2	2.65	0.265
Look frightened	13 (42)	7 (47)	9 (32)	2	1.03	0.596
Claim unlikely things	11 (35)	18 (61)	10 (36)	2	3.70	0.157
Look sad	9 (30)	6 (46)	10 (38)	2	1.11	0.572
Memory loss	2 (20)	2 (15)	4 (16)	2	21.24	0.537
Talk about dead as if alive	1 (3)	2 (15)	0			
Particular thought	6 (20)	4 (31)	9 (33)	2	1.38	0.5
Aches and pains	9 (31)	2 (15)	4 (16)	2	2.20	0.332
Incurable illness	3 (18)	2 (15)	0	2	3.12	0.210
Great future plans	2 (16)	0	4 (15)	2	2.73	0.255

Table 5.24 Early manifestations of abnormality reported by the relatives (% in brackets)

According to the informants Asians were more likely to be a danger to themselves but the rates of attempted suicide were not significantly different compared to the other two groups. They were significantly more likely than the other two groups to report loss of appetite and behave as if hearing voices. They were more likely to claim unlikely things, report neglect of activities and irritability. African-Caribbeans on the other hand were more likely than the other two groups to avoid company and lose all interest but these differences are not significant. Whites were more likely to cause damage, be more excited and less likely to assault others and lesser levels of neglect of activities in comparison with the other two groups. Although these differences are

not significant they are interesting observations. These are early manifestations as reported by the informants and are different from the symptoms identified on the PSE assessments. These highlight the informants' perceptions of the earliest abnormality.

Informants' impression of mode of onset of patient's disorder were categorised as clearly sudden onset (less than one week), precipitous or acute onset, insidious or chronic onset. The results are shown in Table 5.25.

The period since the onset of symptoms was divided into less than a month (acute onset), up to one year (insidious) and over one year (chronic). Among the whites 7 out of 35 (20%) had an acute onset compared with 4 out of 22 (18%) Asians and 6 out of 36 (16%) African-Caribbeans. Thus the occurrence of acute transient psychosis can not explain the differences in rates between the ethnic groups. The remaining onsets were either chronic or insidious. Although this was the commonest presentation across all three groups among the African-Caribbeans nearly two-thirds had an insidious presentation and these differences were not statistically significant. (see Table 5.26)

	White	Asian	African-Caribbean
n=	36	22	36
One month or less	13 (36)	4 (18)	8 (22)
2-11 months	12 (33)	12 (54)	17 (47)
>1 year	11 (30.6)	6 (27.3)	11 (30.6)
one month vs.the rest $\chi^2=3.61, df=2, p=0.164$			
Sudden onset	11 (31)	6 (28.5)	10 (27.7)
Precipitous	3 (8.5)	3 (14.2)	1 (2.7)
Acute poss past symp	2(5.7)	2 (9.4)	2 (5.4)
Acute no past symp	3(8.5)	1(4.7)	1(2.7)
Insidious	16(44)	8 (33.3)	22 (61.1)
Inadequate Info	1 (2.8)	1 (4.7)	0
No clear Psych Hist	0	1 (4.7)	0
$\chi^2=10.36, df=12, p=0.5840$			

Table 5.25 Informant's impression of mode of onset of patient's problems

Asians were more likely than the other two groups to ascribe the mental illness to spiritual or religious causes as well as unacceptable behaviour whereas African-

Caribbeans were more likely to report either no conceptualisation or that there was nothing wrong in the individuals behaviour. This is in marked contrast with the White group who were willing to see mental illness as a possible cause.

	White	Asian	African-Caribbean
No conceptualisation	0	0	2 (5.8)
Nothing wrong	0	0	5 (14.7)
Something wrong but unsure	0	0	0
Mental illness	24 (72.7)	8 (38)	18 (52.9)
Physical illness	4 (12.1)	1 (4.7)	2 (5.8)
Spiritual/Religious	0	4 (19)	1 (2.9)
Magic/curse	0	1 (4.7)	1 (2.9)
Unacceptable behaviour	5 (15.1)	6 (28.5)	5 (14.7)

Table 5.26 Informant or patient's conceptualisation of the presenting problem

The conceptualisation of the presenting problem differed significantly across the three ethnic groups ($\chi^2 = 28.203$, $df = 14$, $p < 0.01^*$). However, when mental and physical illness (as representing illness model) were combined together and compared with the rest the chi-square value was 13.71 ($df=2$, $p=0.001^*$). Asians were more likely to conceptualise the problem as spiritual or religio-magical or as unacceptable behaviour.

The relatives were also asked about the information concerning the patients' current problem given to them by the team looking after the patients. This is recorded in Table 5.27. What the informants report here may well reflect their original preoccupations. The Asian group maintained that the outside agencies told them that something was wrong but in a non-specific manner. They were also the group in which the lowest number were told that their relative had mental illness which was different from the other two groups where broadly similar proportions were informed about the patient's illness. Two relatives in the Asian group were told that the causation was spirituo-religious or magic. Taking mental illness as an appropriate explanation by the outside agencies and comparing it with the rest no significant differences emerged (chi-square 2.38, $df=2$, $p=0.303$)

	White	Asian	African-Caribbean	x ² -	p
No explanation given	5 (17.8)	3 (15.7)	8 (25.8)	0.91	0.633
Problem denied	1 (3.8)	1 (3.5)	0.73	0.695	
S'thing wrong - non-specific	6 (22.2)	8 (42.1)	3 (11.1)	6.25	0.04*
Mental illness	17 (56.6)	7 (35.0)	15 (53.5)	2.48	0.289
Physical illness	3 (11.5)	1 (5.2)	1 (3.5)	1.44	0.48
Spiritual religious or moral	0	1 (5.2)	0		
Magic, curse, taboo	0	1 (5.2)	0		
Unacceptable behaviour	0	1 (5.2)	1 (3.5)		
Other	2 (15.3)	0	0		

Table 5.27 Explanation of nature of patient's problem as given to informants by outside agencies

The informants' own perceptions of the patient's current problem and how much they hold the patient responsible are shown in Tables 5.28 and 5.29 respectively. As the informants often gave more than one explanation of the causative factors, the total number of responses vary.

	White	Asian	African-Caribbean	x ² -	p
N	29	21	32		
No explanation	2 (8.3)		2 (6.2)		
Hereditary	4 (15.3)	1 (4.7)	4 (12.5)	1.36	0.505
Faulty biological functioning	6 (21.4)	2 (9.5)	1 (3.1)	5.14	0.07
Substance abuse	6 (23.0)	4 (19.0)	11 (35.4)	2.01	0.365
Faulty nutrition	1 (3.5)	2 (9.5)	4 (12.9)	1.63	0.443
Physical effects of environment	2 (7.1)	2 (9.5)	0	2.89	0.235
Family life	13 (43.3)	6 (28.5)	16 (50)	2.41	0.299
Lifestyle/character	12 (41.3)	10 (47.6)	16 (47)	0.27	0.874
Social environment	7 (24.1)	8 (38.0)	4 (12.5)	4.69	0.095
Supernatural forces:					
Unprovoked	1 (3.5)	3 (14.2)	1 (3.5)	2.89	0.236
Provoked	0	0	0		
Precipitant	2 (7.4)	0	1 (3.5)		
Others	5 (35.7)	3 (20)	5 (16.6)	2.06	0.356

Table 5.28 Informant's conceptualisation of patient's current problems

Among the white group the relatives were more likely to see heredity and biological functioning as possible causes of the patient's problem. Among the Asians family life and characterological faults were seen as most important whereas in the African-Caribbeans substance abuse, family life and character or lifestyle were reported to be common causes.

	White	Asian	African-Caribbean
No responsibility	16 (59.2)	6 (30)	10 (34.4)
Partial	9 (33.3)	7 (35)	14 (48.2)
Total	2 (5.4)	7 (35)	5 (17.2)

Table 5.29 Degree of responsibility patient holds for the condition

When partial and total responsibility figures were combined together and compared with those being seen as not responsible, chi-square was 5.15, df=2, p=0.07 verging on significance. Informants for white patients were more likely to hold the patient not responsible compared with the other two ethnic groups.

5.6 PATHWAYS INTO CARE

In the PPHS, the informants were asked to identify all ports of call that were used since the onset of symptoms and prior to the contact with psychiatric services. They were asked to relate each contact serially. These are presented in Tables 5.30 to 5.33 and a graphic representation is shown in Figure 5.2.

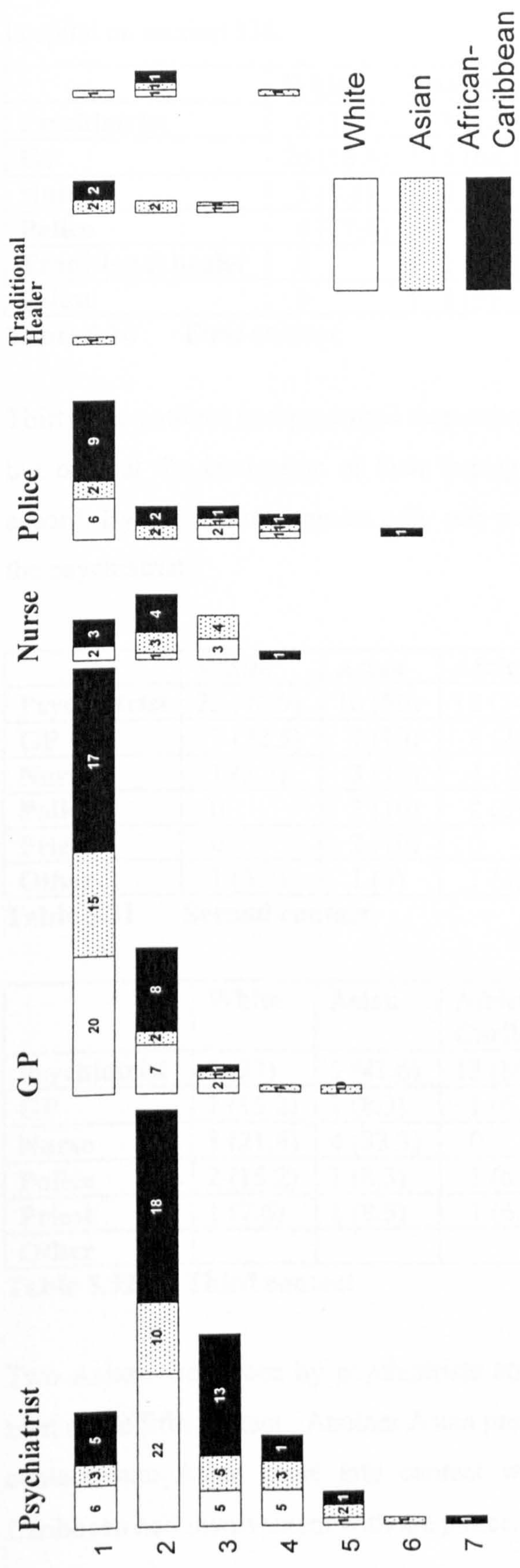


Figure 5.2 Pathways Into Care

Of 26 patients admitted on sections of the Mental Health Act (1983), 18 were admitted on Section 2 (assessment section); two each were admitted on sections 3 and 4 and another four came in on section 37. Two individuals were brought to the hospital on section 136.

	White	Asian	African-Caribbean
Psychiatrist	6 (17.6)	3 (13.6)	5 (13.8)
GP	20 (58.8)	15 (68.1)	17 (47.2)
Nurse	2 (5.8)	0	3 (8.3)
Police	6 (17.6)	1 (4.5)	9 (25)
Traditional healer	0	1 (4.5)	0
Priest	0	2 (9)	2 (5.5)

Table 5.30 First contact

Thirty one patients had presented themselves through their GPs and another 15 did so but only at the instigation of their family whereas the former did so of their own accord. By the seventh contact only one patient (an African-Caribbean) had not seen the psychiatrist

	White	Asian	African-Caribbean
Psychiatrist	22 (70.9)	10 (50)	18 (54.5)
GP	7 (22.5)	2 (10)	8 (24.2)
Nurse	1 (3.2)	3 (15)	4 (12.1)
Police	0	2 (10)	2 (6)
Priest	0	2 (10)	0
Other	1 (3.2)	1 (5)	1 (3)

Table 5.31 Second contact

	White	Asian	African-Caribbean
Psychiatrist	5 (37)	5 (41.6)	13 (86.6)
GP	2 (15.2)	1 (8.3)	1 (6.6)
Nurse	3 (21.8)	4 (33.3)	0
Police	2 (15.2)	1 (8.3)	1 (6.6)
Priest	1 (7.6)	1 (8.3)	1 (6.6)
Other			

Table 5.32 Third contact

Two Asians were seen by psychiatrists and one each in the other two groups were seen at the fifth contact. Another Asian presented to his GP at this point. At the sixth contact, one Asian came into contact with a psychiatrist whereas one African-Caribbean had involvement with the police.

	White	Asian	African-Caribbean
Psychiatrist	5 (83.3)	3 (50)	1 (33.3)
GP	0	1 (16.6)	0
Nurse	0	0	1 (33.3)
Police	1 (16.6)	1 (16.6)	1 (33.3)
Other	0	1 (16.6)	0

Table 5.33 Fourth contact

5.6.1 COMPULSORY ADMISSIONS

Eleven patients came via the police although only two were brought in on a place of safety order (section 136). For the rest, the police had been involved in their getting to the hospital (either the psychiatric emergency clinic or accident and emergency departments of the two district general hospitals). Five had come through prison. Four were referred to priests as the first port of call. In four cases, friends or families either called an ambulance to transport the patient as an emergency to the hospital or did so themselves.

Table 5.34 illustrates various sections of the Mental Health Act used across the three groups. It appears that when Asians came in contact with services 25% were sectioned in comparison with 31% of whites and 26% of African-Caribbeans a broadly similar proportion across the three groups..

	White		Asian		African-Caribbean		Total
	M	F	M	F	M	F	
Section 2	7	2	2	2	5	0	18 (64%)
Section 3	0	0	2	0	0	0	2 (7%)
Section 4	1	0	0	0	0	1	2 (7%)
Section 37	1	0	0	0	3	0	4 (14%)
Section 136	1	0	0	0	0	1	2 (7%)
TOTAL	10	2	4	2	8	2	28 (100%)

Table 5.34 Total number of sections across three groups

5.7 PREMORBID PERSONALITY

Patients' premorbid personality traits as identified by the informant are illustrated in Table 5.35. This is not a formal test of personality but only a few character or personality traits as described by the relatives have been highlighted.

	White	Asian	African-Caribbean	df	x2
N	32	20	30		
Suspicious	6(18)	8(42)	4(13)	2	5.29 0.070
Being picked on	6(18)	5(33)	7(24)	2	0.33 0.846
Excess jealousy	4(12)	4(22)	3(10)	2	1.07 0.585
Lack of self-criticism	8(25)	7(38)	6(20)	2	1.43 0.489
Generally gloomy	3(9)	2(11)	7(24)	2	2.87 0.238
Generally excited	9(27)	1(5)	8(26)	2	4.46 0.107
Variable mood	7(22)	1(5)	6(20)	2	2.76 0.251
Set routines	4(12)	1(5)	1(3)	2	2.13 0.345
Eccentric	5(16)	1(5)	4(13)	2	1.35 0.507
Emotionally withdrawn	6(19)	2(10)	9(30)	2	3.05 0.218
Exaggerate	5(16)	1(5)	2(7)	2	2.09 0.351
Optimistic	12(36)	4(22)	12(39)	2	1.86 0.395
Capacity to endure stress	4(12)	2(11)	14(45)	2	12.77 0.001*
Dependable and loyal	21(62)	11(61)	22(71)	2	1.79 0.407
Independent	17(57)	8(44)	17(54)	2	1.41 0.494

Table 5.35 Premorbid personality status as perceived by patients' relatives

The only significant difference to emerge was that informants of the African-Caribbean patients were more likely to see the patients as being capable of enduring stress. Exaggeration of premorbid traits did not show any differences even though a bigger proportion of whites were reported to have demonstrated this characteristic. Interestingly although African-Caribbean patients had presented with delusions of reference the premorbid levels of suspiciousness were reported to be remarkably low.

5.8 SUMMARY OF KEY FINDINGS

The patients with psychosis were screened over a two-year period in two catchment areas. White patients were recruited from one catchment area for one year and the Asian and African-Caribbean patients for two years from the same catchment area and the African-Caribbean patients from the second catchment area for two years. Using the OPCS (1991) guidelines the denominator was calculated and incidence rates determined according to ethnicity, age and sex.

HYPOTHESIS H₁: The first of the two primary hypotheses, that Asians would have lower inception rates of schizophrenia than whites, was not upheld. The rates among

Asians were broadly similar to those among whites. However the inception rates of schizophrenia in the Asian group were lower than those of African-Caribbeans.

HYPOTHESIS H₂: The second of the primary hypotheses, that African-Caribbeans would have higher inception rates when compared with whites, was upheld. In relationship to the first primary hypothesis, it follows that the inception rates of schizophrenia were higher but not statistically significant in the African-Caribbeans when compared with Asians.

HYPOTHESIS H₃: The third (H₃), which stated that one year outcome will be better for the Asians and worse for the African-Caribbeans compared with the white group was proven. As in previous studies, Asians had a generally better outcome at one-year follow-up. This was associated with being older, female, married and living with the family. Unemployment and African-Caribbean ethnicity both were shown to be related to poor outcome, but not independently.

In the Asian groups, more females over the age of 30 presented for the first time with schizophrenia - a finding not previously reported. Along with ethnicity, unemployment and living alone were associated with high inception rates of schizophrenia in the African-Caribbeans. The Asian group was more likely to be living with the family and to be married. As this sample was older and female, this association is not surprising.

The symptoms of schizophrenia across the three ethnic groups were not too dissimilar. In the S+ group, African-Caribbeans were more likely to have delusions of reference but not visual hallucinations suggesting that there are more cultural similarities than dissimilarities. Similarly the only differences to emerge in the non-S group were presence of simple depression and tension in African-Caribbeans. The pathways into care were not too dissimilar either suggesting that the three ethnic groups in the present study are broadly similar in their experiencing symptoms and seeking help.

6. DISCUSSION

6.1 PROBLEMS IN METHODOLOGY

If the methodology of a study has problems, any interpretation of the data is fraught with difficulties. The possible shortcomings of this study are many. The first and the most important one concerns the establishment of the inception rates.

6.1.1 INCEPTION RATES

6.1.1.1 Numerator

The incidence rate of any illness is the number of new cases which appear in a given population during a given period of time (usually one year), usually expressed as a proportion of the total number of persons in the same unit of population at risk of developing the disorder (Jablensky 1995). In order to determine new cases, very extensive searching mechanisms must be set in motion, which is often problematic due to paucity of resources - both financial and personnel. The patients may choose not to seek help and unless extensive population surveys are carried out they may not be identified. Thus a more accurate term may be inception rates. Although every possible effort was made to screen every single possible source of help in this study (especially clinical facilities) some cases may not have sought help at all.

The aim of the study was to focus on cases of schizophrenia even though the rates of all psychoses have been reported to be high. This was done for two reasons – firstly the number of cases with other psychoses would have been fewer and any ethnic differences would have been even more muddled. Secondly as the social factors were being studied it was decided to concentrate on schizophrenia to study a relatively homogenous group of patients. Such an approach has problems by virtue of excluding other diagnoses of psychosis but the practical considerations were an important factor as well in reaching this decision.

6.1.1.2 Denominator

The second problem in determining the rates is that of having an accurate denominator. It is possible that African-Caribbeans were more likely to have been under-enumerated, although the OPCS suggested in their Census guide that their

proposed solution had taken this into account. OPCS Census Users' Guide (1991) has recommended using a formula for calculating the denominator to adjust for under-enumeration - a method followed in this study - it is still possible that this may be an underestimate. The guide suggested that the under-enumeration affected all ethnic groups more or less equally especially among the younger males.

A related problem for both the numerator and the denominator is that of definition of ethnicity and pooling of the data. Those patients who were Pakistani, Punjabi, Gujarati or Sri Lankan have been lumped together with others under the broad rubric of Asian .

Their genetic and cultural influences are different and because the numbers are small it is more problematic to determine incidence rates for each group. On the question of mixed race, it appeared that as there was no category of mixed race in the census it was not possible to get the figures for the denominator. Furthermore if individuals' parents had been of mixed race as well, accurate classification would have been impossible. This example simply highlights the problems in this field of research.

Because the numbers of African-Caribbean and Asian patients were small, it was decided to collect the data over a two-year period and in two disparate catchment areas. This, in itself, raises methodological problems, especially if social factors are being studied across ethnic groups. The two catchment areas represented inner city (inner London) and suburban areas (Greater London). The difference in their Jarman indices was difficult to monitor as Camberwell Health Authority covered a catchment area larger than South Southwark. This difference remains an area of problem in pooling the data. Whereas only African-Caribbean patients were collected from Camberwell, which has lower socio-economic standing, in Ealing all three ethnic groups were recruited. It is possible that African-Caribbeans as a group may have been subjected to more socio-economic deprivation than whites or Asians. In interpreting the results this caveat must be remembered.

6.1.1.3 Measurement

There have been previous criticisms of the use of Western instruments in measuring psychopathology in individuals who do not belong to the culture (the "category

fallacy" according to Kleinman, 1977) and although the instruments used in this study have been previously used in Asian and Caribbean settings (WHO, 1973; Jablensky *et al*, 1992; Bhugra *et al*, 1996) this caveat must be remembered in interpreting the results. This caveat is more likely to affect broad schizophrenia and non-S categories as demonstrated by the IPSS and DOSMD studies. Another problem in measurement is the reliance on CATEGO program for producing diagnostic syndromes and categories. The program does not give diagnosis but diagnostic categories. An advantage of using such an approach of relying on a computer program is the likelihood of doing away with variability of clinical diagnosis which has been linked with the ongoing issue of misdiagnosis. In the present study relying on inclusion and exclusion criteria (which focus on symptoms) and computerised diagnostic syndromes reduces the likelihood of misdiagnosis though not eliminating it completely. As previously discussed in section 2.3.4, a key criticism of the incidence studies of schizophrenia have been the problems of case-finding and the determination of onset. The use of research instruments developed in one culture may not elicit the requisite information in other populations. On the other hand the presentation of patients to health agencies is dictated by their own and their carers' observations on their behaviour and this indicates that the help-seeking depends upon the facilities available and reasons for help-seeking. However, if these differences were related to a different kind of psychosis not detected by traditional measurement tools, the differential across the groups would be even greater.

An additional caution is that the numbers in two ethnic minority groups, especially the Asian group (although the largest to be reported from the UK), are small and the resulting comparisons have not yielded many statistically significant results.

6.1.1.4 Definitions of ethnicity

As noted in section 2.5, the correct definitions of ethnicity remain problematic. Despite only limited categories having been developed and used by OPCS in the census survey, to make direct comparisons it was decided to use the same categories. On the other hand leaving these categories as they are produces a large number of cells with small numbers. Hence any pooling of the data reduces heterogeneity which in itself may be a significant factor in the aetiology of the illness. There is some debate on exact definitions of ethnicity (eg. Senior and Bhopal, 1994; Royce, 1982)

and the area remains fraught with difficulties. In the present study all Europeans, including Irish, Spanish and Portuguese, have been included in the white group in order to increase the numbers for calculation of inception rates, and the baseline data pooled to determine the denominator but their socio-cultural characteristics are likely to be different. The same is true of pooling the data for the Black groups.

An additional point to do with self-ascription must be remembered. Individuals of, say, Indian extraction but born in East Africa and having migrated to the UK may have difficulty defining themselves as East African, Indian or British Asian. Similarly, those with mixed ethnicity (with parents from two different ethnic groups) may see themselves as one or the other ethnic group. In the present study, at least two individuals of mixed parentage identified themselves as black (and included in that category). One individual saw himself as mixed race and since there was no clearly identified denominator for this group was excluded from the final calculations.

6.2 PRIMARY HYPOTHESES (H₁, H₂ AND H₃)

In this section the results are discussed with reference to other studies.

6.2.1 INCEPTION RATES

The two primary hypotheses proposed that the inception rates of schizophrenia in the Asians will be lower than those among the whites and these rates in the African-Caribbeans group will be higher when compared with the white group. The first hypothesis was not upheld in that the rates among the Asians were similar to that of the white group. However, the inception rates of schizophrenia in the African-Caribbean group were higher than those among the whites thereby confirming the second primary hypothesis.

The results are in accord with the findings of previous studies in demonstrating that African-Caribbeans in the UK are at a greater risk of developing schizophrenia than whites. However, the present finding of a two-fold excess is much lower than that found by Harrison *et al* (1988) and King *et al* (1994); this may be due to a more accurate denominator especially in relation to ethnicity compared with that available when Harrison *et al* (1988) carried out their study. King *et al* (1994) had collected their data over one year only and the numerator is relatively small leading to wide

confidence intervals. In the present study the rates among the whites are only slightly higher than expected when compared with previous London data but higher than the Nottingham rates among the whites.

There may be two explanations for this. First, as multiple sources were screened, it is possible that the study was able to collect a relatively more complete sample than in previous studies. Secondly, Ealing has a large number of Irish, Polish and other east European populations, which may explain some of the increase as some earlier studies have reported high rates of schizophrenia in the Irish (Walsh 1969). Any increase in white patient numbers is likely to reduce the differential between the white and the African-Caribbean samples. Furthermore, when compared with the London rates and rates with other countries reported from the DOSMD study by Jablensky *et al* (1992), it is clear that these are within the range previously reported (see Table 6.1). The rates of S+ schizophrenia among the whites in this study are the highest of all the groups reported in the DOSMD study (Jablensky *et al* 1992) and those of the Asians. In the latter group the rates of broad Schizophrenia are very similar to the rates reported from rural Chandigarh. This is the geographical area from where most of the Asian migrants to this country hail from.

It must be stressed that these data were collected over a different time span than those in the WHO studies, which too may affect patient recruitment and numbers as it has been argued that the rates of schizophrenia may well be changing (Der *et al* 1990). It is also likely that the differences in non-S rates, although statistically significant for the DOSMD study, are also more useful in highlighting cultural differences.

Country	Broad S Rate	S+ Rate	Non S+ Rate
Aarhus	1.50	0.70	0.80
Chandigarh - Rural	4.20	1.10	3.10
Chandigarh - Urban	3.50	0.90	2.60
Dublin	2.20	0.90	1.30
Honolulu	1.60	0.90	0.70
Moscow	2.80	1.20	1.60
Nagasaki	2.00	1.00	1.00
Nottingham	2.20	1.40	0.80
London (White)	3.00	2.00	1.00
London (African-Caribbean)	5.96	3.54	2.32
London (Asian)	3.66	2.08	1.45
Trinidad	2.15	1.59	0.56

Table 6.1 Comparison of rates

6.2.2 GENDER DIFFERENCES IN INCEPTION RATES

A high inception rate was found in all African-Caribbean males for all ages but among African-Caribbean females under 30 only. By contrast, a high rate compared with that of the whites was found only in Asian females over the age 30. The rates among the Asian sample are lower than in the African-Caribbean sample except in older females. This is an intriguing finding previously not reported in the literature. As these are older, married women, it is possible that a different set of aetiological factors may be at play here. The ICMR (1989) study of acute psychosis (onset less than three months) had reported high rates in females from their Vellore (South Indian) sample compared with Lucknow (North India) and Madras (South India). The ICMR study had relied on the PSE but had also included detailed descriptive details in their data collection. Organic factors like fever have been linked with acute psychotic states in developing countries (Collins *et al*, 1996). In the present sample only two out of ten older females had complained of fever up to four weeks prior to the onset of symptoms. It is most unlikely that they were suffering from any tropical infectious diseases, however, it is difficult to be absolutely certain because no assessments in the diagnosis of such conditions were carried out. As acute psychosis (or brief reactive psychosis) has been shown to be linked with acute onset and good outcome it is probable that some of the Asian sample may well belong to this category, although there were no remarkable differences across the three groups in the mode of onset.

Previous studies have suggested that the gender differences in the incidence rates of schizophrenia favour the males. Riecher-Rossler *et al* (1992) had found a 12-fold

higher first-admission rate for single men compared with married men and 3.3 times higher rate for single women compared with married women. The rates among the African-Caribbean are higher when compared with the whites but the differential between the two groups is the lowest reported so far. This is the first study to suggest that older age and female sex are related to the inception rates of schizophrenia in Asians. Although symptoms do not differ, in view of the later onset, place of birth and gender rates suggest that this may be a different illness which needs to be confirmed in subsequent studies.

It is certainly possible that some social factors, like having children living at home, are at play here. Once the children have grown up and left home the morbidity may become more visible. It is possible that the children were helping around the house and the standards of household care suffered when they moved out. It is only then that other members of the family may recognise an illness and seek help. Donovan (1984) had reported that in a radio station phone-in, Asian men were more likely to ring in to seek information on their wives' behalf, which would suggest that Asian females are likely to seek help only if their husbands or other family members are pushing them to do so. However, from the duration of illness data as well as the presenting symptoms this appears not to be the case. The facilities are less likely to ignore symptoms of delusions and hallucinations. As more than half of the Asian sample presented to the services as a danger to self or odd behaviour this is a highly unlikely explanation. The other distinct factor is that virtually all of these patients were born outside the UK - whether that is protective in the short term but not in the long term remains a matter of conjecture and needs to be studied further. The question of role of migration in the genesis of schizophrenia cannot be answered adequately in the present study due to method employed here. As noted earlier a large majority of Asians were born outside the UK and being older females were more likely to accompany their families rather than be primary migrants. The reasons for migration are many - selective or forced (in whether the individual chooses or is forced to make a choice), economic or political reasons or short, fixed or long term open ended migration. The stresses on these groups will be quite different depending upon the reason for migration. The suggestion that second generation African-Caribbeans (Harrison *et al*, 1988) are more likely to suffer from schizophrenia may

not be applicable to Asians although this needs to be confirmed. In these data only 12% of Asians were born in the UK and the accurate incidence rates for each generation are difficult to assess because the denominator data are not available and the numerator data for the UK born is still too small.

Ödegaard (1932) postulated that apart from the constitution of the individual, the life conditions of (Norwegian) immigrants may favour the development of schizophrenia. The notion of a vulnerable constitution or personality is harder to refute. There have been suggestions that vulnerable individuals tend to migrate but in the past two or three decades the processes of migration have become much more restrictive and individuals have to be psychologically more robust to get visas and need to learn about other cultures prior to migration (Cochrane 1977). As we shall see later, the personality profiles of the patients do show a small trend in traits that suggest that Asians and African-Caribbeans were more often socially withdrawn. The significance of these is discussed in section 6.5.

The rates of S+ schizophrenia in the present study among the African-Caribbeans are 3.54/100,000 compared with 2.00 among whites and 2.08 among Asian populations. The younger African-Caribbean males are three times more likely and older men six times more likely to have schizophrenia compared with females. These findings are broadly similar to the admission rates reported by McGovern and Cope (1987a) in Birmingham. It is possible that this differential is due to social factors but why it should affect the two sexes in different ways is difficult to explain. It may be that living alone separation from parents or gender role expectations play a role - for example, if a male who is expected to earn and keep a family is unable to do due to social adversity, the impact on self-esteem may well be different from that in females.

The high rates among the African-Caribbean indicate that when considering aetiology two key factors need to be ruled out. The first of these is genetic predisposition. There remains a considerable body of evidence which suggests that schizophrenia has a genetic predisposition (Asherson *et al*, 1995; McGrath and Murray, 1995). If that were the explanation for high rates in UK African-Caribbeans, then the rates would be high both among first generation immigrants and within the genetic pool, i.e.,

countries from where these individuals originate. Two recent studies from Jamaica and Trinidad reported low rates of schizophrenia when compared with the rates among the African-Caribbeans in the UK (Hickling and Rodgers-Johnson, 1994; Bhugra *et al*, 1996). These observations suggest that environmental factors play an important role in the aetiology of schizophrenia in the UK African-Caribbeans.

There is some suggestion that with a relatively small population of first and second generation migrants the genetic loading resulting from selective migration may be enhanced by inter-marriage.

Although the present study did not look at this, consanguinous relationships are unlikely in the Hindu and Sikh Asians who form a majority of this group. If the intermarriage was the key explanation the rates of schizophrenia will be equally high in both migrant groups. On the other hand increased rates of schizophrenia among some internal (within the same country) migrants cannot be explained away by intermarriage alone (see Parker and Kleiner 1966, for a detailed discussion).

The second set of key factors requiring consideration concerns the stress of migration and other socio-economic factors like housing, social support, employment and discrimination. Sashidharan (1993) cautions against using Ödegaard's model for understanding schizophrenia among African-Caribbeans in the UK. He argues that social factors more than the process of migration are likely to explain the increase in rates of schizophrenia in the migrant population. Bagley (1971) had proposed lack of community integration and status isolation as two key factors explaining the high rates of schizophrenia among African-Caribbeans determined from data from the Camberwell register.

To summarise this section, the inception rates of schizophrenia are higher than previously reported for the white population in Ealing but the differential between the African-Caribbeans and the whites is not as high as previously reported. The rates among the Asians are broadly similar to those reported among the white population. Older females show the highest rates in the Asian population. This achieves the first aim of the study and disproves part of the first hypothesis (H₁) that Asians have lower

inception rates than whites but confirms the second hypothesis (H₂) that African-Caribbeans have higher rates when compared with whites.

6.3 OUTCOME (HYPOTHESIS H₃)

The one-year outcome in the present study indicates that African-Caribbeans with schizophrenia have the worst outcome of the three ethnic groups and this is related to ethnicity rather than other factors, though unemployment may exert a significant contributory effect. Men tend to have a worse outcome than women, which is in concordance with previous literature.

6.3.1 ETHNICITY AND OUTCOME

Birchwood *et al* (1992) from a case-note study showed that Asians had a relapse/re-admission rate of 16% compared to 30% in whites and 49% in African-Caribbeans. These are broadly similar to the findings in the present study, especially in relationship to Asian and white groups, though 60% poor outcome (with three untraced African-Caribbeans) is the highest reported poor outcome rate in the literature. Both Birchwood *et al* (1993) and Eagles (1993) suggest that family attitudes and support and living with families made a contribution to better prognosis among Asians. When they controlled for differences in the integrity of family structure, group differences in relapse and re-admission were no longer significant.

Gupta (1991), in a long term follow-up of Asian first generation immigrants in the UK, reported that they had a shorter average stay in hospital, had fewer in-patient admissions per year and lower total percentage of time spent as an in-patient. He concludes that Asians had a better outcome than whites which is confirmed by the present findings although these differences are statistically non-significant. The DOSMD study (Jablensky *et al* 1992) too had reported that patients in developing countries have a better outcome.

The ICMR (1988) study reported that 45.2% of the sample had best remission compared with 10.5% worst remission; 44.3% had intermediate remission. Overall outcome was best in 32.5% of cases and worst in 9.9% and intermediate in the rest, although there were variations across the three centres. None of these centres is near

the part of India from which most of the Asian patients for the present study come. The follow-up reported is a two-year follow-up and reflects on similar outcomes in the present Asian samples.

In the African-Caribbean group, the outcome at one year is very poor - two-thirds of the patients are faring badly. This is in a marked contrast to the Caribbean patients with schizophrenia in Trinidad - using a similar strategy for data collection. In the Trinidad sample, one year after first contact, only 19% were in the episode of inclusion, had had a definite relapse or committed suicide (Bhugra *et al*, 1996). These striking differences may well be due to factors like low unemployment rates in Trinidad and more social support although it needs to be confirmed in future research.

Eagles (1993) argues that as African-Caribbeans were less likely to be discharged back to their families (and more likely to be discharged to live alone) and the absence of social integration may be a result rather than a cause of continuing schizophrenic symptoms.

Eagles (1993) criticises the interpretations put forward by Birchwood *et al.*(1992) and proposes that their data indicate that African-Caribbeans have the poorest prognosis, which is confirmed by the findings in the present study. Birchwood *et al* (1992) had reported low relapse rates in the Asian groups but linked this with living with family, which was a significant factor in the outcome. In the present study, when good outcome cases were compared with poor outcome cases, living with family did not emerge as a significant factor. Unemployment, living alone and separation from father were all important factors. It is possible that the present sample and the Birchwood group are quite different from each other.

Jablensky (1995) proposed that for poor outcome of schizophrenia robust predictors included being single, social isolation, longer duration of previous illnesses, insidious onset and negative symptoms on first admission. On the other hand being married, good work adjustment, shorter duration, acute onset were predictors of good outcome. On these parameters the group with the worst outcome, ie. the African-Caribbeans in the present study fulfil four out of five robust predictors. These are being single,

social isolation, longer duration of pre-index illness as well as insidious onset. Negative symptoms were not very prominent in this sample. Among the other predictors of poor outcome such as being male, schizoid personality, primary delusions, social withdrawal, etc. most of the group met these predictors making their prognosis predictably worse. Asians were more likely to be older, female, married, with affective symptoms - all feature of good prognosis predictors.

To summarise, the data for social factors such as housing, unemployment, separation from parents, and forensic history have been linked with poor outcome. It is possible that with larger samples and more detailed instruments measuring social factors as well as details of outcome with regular follow-up the significance of such factors may well have become clearer.

The present study was not designed to study the causal effect of social factors on to the aetiology of schizophrenia. Such a comparison should ideally use a case-control method which has the advantage of studying rare diseases and multiple potential causal factors of the disease. As the primary aims of the study were to establish inception rates of schizophrenia across three ethnic groups living in the same catchment areas and one-year outcome the study design did not look at the impact of social factors on aetiology of schizophrenia.

As noted above, it is likely that poor housing, social isolation and unemployment all act as relative vulnerability factors which affect the individual's self-esteem. Future research needs to focus on social factors as well as genetic vulnerability and include ethnicity as only one variable rather than focus on ethnicity to find causes for increased rates of schizophrenia in African-Caribbeans.

6.4 SOCIAL FACTORS AND SCHIZOPHRENIA

As discussed in the literature review, social factors have been identified as associated with the aetiology and outcome of schizophrenia. Social factors like education, socio-economic status, quality of housing, overcrowding and other demographic factors like age, gender and religion are important when trying to understand the onset of schizophrenia, engagement with clinical services and medium- to long-term outcome.

Hare (1956a,b) had put forward the idea that different rates of mental illness exist among men in different occupational groups - schizophrenia was commoner among semi-skilled and professional classes. The hypothesis of slow downward drift although superficially attractive does not hold when closely examined. The work of Hollingshead and Redlich (1958) indicates that the shift between parents and the patients is more often in the upward direction. Whereas King *et al* (1994) found no significant differences in association for the rates of schizophrenia across ethnic groups, this was probably a consequence of their small sample size, since the present study demonstrates major differences for four of the seven factors examined.

Modood *et al*, (1997) found that across all Indian sub-continent groups including African-Asians, 72% of the general population were married compared with 29% of the African-Caribbeans. In the latter group an additional 10% were living "as married". Thus, in all the patient groups the numbers married were lower than expected when compared with the general population - only in the Asian group did it come close to the population norms.

As Faris and Dunham (1939) observed, more important than migration itself is the effect of movement upon the social and the mental adjustment of the person. They reported that in spite of different types of schizophrenia in different parts of the city, the key influencing factors were social factors including social mobility. The nature of social life may cause high rates of disorder.

Thus the patient samples showed similar proportions in the Asian patients, but among the African-Caribbean patients the number of those born in the UK was higher. This makes it unlikely that stress related to the processes of immigration plays a role in the genesis of schizophrenia among African-Caribbeans although it may still do for Asians.

In all three groups the patients were much more likely than the general population to be living alone. This may be due to several reasons. It is possible that due to prodromal symptoms they may well have drifted into social isolation. It is also possible that due to social isolation their symptoms were not being identified by

carers. Living alone may also be linked with a reduction in social support and lack of close confidants.

Thus, being alone can be seen to be associated with schizophrenia in that in all the three groups the proportions of those living alone are between two and three times higher in the patients. Although direct comparisons are problematic due to different age groups this discrepancy between the population and the patient groups suggests that living alone may prove to be an important factor in the aetiology of schizophrenia. Hare (1956a,b) proposed that a relation between certain types of mental illness and the cluster of factors subsumed under "social isolation" was possible. When he studied the distribution of mental illness across different wards of Bristol, he found that schizophrenia was clustered in the inner city wards and single person households were more likely to have schizophrenia (Hare, 1956a,b) - a finding confirmed by the present study. However, the direction of such association needs to be established in future work.

Any social isolation which reduces contact with others is likely to lead to poor self-confidence, and the consciousness that others may not desire one's company will act as a serious barrier to social relations. Individuals who see themselves as ugly, inferior or in disgrace may choose to withdraw themselves. Conditions which produce such social isolation are also more common in disorganised communities. Marginalisation, both social and personal, will push the individual to withdraw into poor quality living conditions. Faris and Dunham's (1939) finding that rates of schizophrenia were higher among the black, the foreign-born and native-born in areas not primarily populated by their own members tends to support the role of social isolation.

As stated earlier, it is possible that there may be an element of drift into council housing and being alone related to the prodrome of the illness and also contribute to pre-morbid decline. It is also likely that the choice of such accommodation may be deliberate in looking for social withdrawal but this needs to be confirmed in other studies.

The present method is not robust to confirm but there is a likelihood that social isolation is associated with the onset and inception rates of schizophrenia. This may be related to flat affect or simple depression in one-third of African-Caribbean patients, and living in council accommodation which may well be of poor quality. Additional features like multi--storeyed tower blocks may make it difficult for others to visit thereby contributing to the continuing isolation.

6.4.1 HOUSING

Two-thirds of Asians lived in owner-occupied accommodation, whereas the same number of African-Caribbeans lived in rented accommodation. The white group was split marginally in favour of owner-occupied accommodation. Three-quarters of the African-Caribbean population was renting from the local authority compared with only a quarter of the white population. These findings indicate that there are important differences across the three groups as far as housing is concerned. How much the quality of housing affects individuals' mental health and produces additional stress is difficult to know. As mentioned earlier, the feelings of insecurity and uncertainty associated with renting are bound to contribute to stress. The quality of council housing and difficulties in getting repairs done and problems fixed may well prove to be a chronic ongoing difficulty and may contribute to mental distress. As no data were collected on problems with landlords it is difficult to be certain about the degree of distress.

ONS (1996) reported that ethnic minority individuals were more dissatisfied with their accommodation than those from the white group (between 3 and 6 times more common). This dissatisfaction was higher among those renting than among owner-occupiers. That is not to say that owner-occupiers are always satisfied but the degree of dissatisfaction will be related to age of the property, quality of housing, tenure, access to amenities and local facilities. In the ONS (1996) survey it appeared that 48% of African-Caribbeans had been renting from the local authority and 11% privately. In the Indian sample, 83% owned their property, 8% rented from the social sector and 9% rented privately. These figures are broadly similar to those reported by the present sample. When compared with data from the community survey (ONS, 1996) it would appear that the Asian sample is generally more likely to have better quality homes.

The type, quality and location of housing will, in part, depend upon the household's economic position and will affect the quality of life experienced by its members. The patterns of housing and occupation are dictated by patterns of immigration. In the periods when immigration was high, distinctive patterns of tenure developed. Newly arrived immigrants tended to find accommodation in the private rented sector - the most accessible part of the housing market. Over the following years, many of these people were joined by their dependants and other members of their family - they therefore needed to find bigger accommodation. For many, cheap rent with the council was not an option because one had to be living in the area for a minimum period of time. The main option for many immigrants was therefore to buy cheaper properties in inner cities. These patterns led to a quality of housing which was distinctly different across the two groups - Asians and African-Caribbeans. For Asians, owning the house, even when in a poorly paid job, was a priority because of the preference to live close to family and other members of the ethnic group. ONS (1996) suggests that these patterns have continued and the Indian group is far more likely to own their homes than any other ethnic group and also least likely to be renting from the social sector. The broad differences in owner-occupation are very much cultural and economic and the properties occupied by the patients in the present sample reflect this.

6.4.2 OVERCROWDING

One-third of the African-Caribbean sample lived alone. Nearly half the Asian sample lived as couples with children. However, in the latter group more than one-third lived with at least four members in the household and nearly a quarter with more than five members. This may suggest a degree of support within the family but may well also lead to high Expressed Emotion (EE) particularly over-involvement in the family. Although studies in North India have shown a high proportion of low EE relatives in the Indian families (Wig *et al.* 1987a, b; Leff *et al.* 1987) emotional relationships and resulting social support may be different in immigrant families. This remains a useful avenue for future research. Overcrowding varies across different Asian groups (Nazroo 1997).

Hare (1956a,b) reported that cases of schizophrenia were concentrated in areas of high population density (persons per acre) rather than in relation to overcrowding itself. The question of overcrowding on the one hand as an important factor and social isolation on the other has not been resolved and deserves to be studied further. It is possible that schizoid personality may contribute to social isolation but not to overcrowding. Again the contribution of various personality factors needs to be investigated. ONS (1996) data suggest that among the Indian community (10% of households) overcrowding was as common as among the African-Caribbeans, but nearly 50% of the Bangladeshi sample lived in overcrowded households. The definition of overcrowding must include a standard for the number of bedrooms a household needs, depending upon its composition and the relationship of its members to each other. The white population generally has under-occupation. This may be due to the higher proportion of single person households in the community - a pattern not dissimilar to the present sample.

6.4.3 CONFIDANT AND FAMILY

Brown and Harris (1978) had proposed lack of a confidant as a vulnerability factor in the aetiology of depression. In the present study, the aim was to identify the degree of involvement by the confidant and degree of contact to indicate a level of social support. The frequency of contact with the family is broadly similar across the three groups but the African-Caribbeans are marginally more likely to be isolated in that they may see or speak to the members of the family fortnightly or monthly, though they are as likely as the other two groups to be living locally. Although these results are not significant these suggest that African-Caribbeans are more likely not to share their problems with anyone but if they do they are more likely to do so with female friends and family rather than with their partner. They are most likely not to have any close confidant. Thus it would appear that the social support is weak when it exists or absent altogether. In addition, they are less likely to share their problems, thus creating a pattern of limited social support, isolation and poor confiding in spite of having more access than the other two groups. This pattern when compared with the members of the community who are not ill suggests only a moderate increase in the patients but it is not clear whether these patterns are a cause of their illness or a consequence. However, this needs to be confirmed with larger samples. As Hare (1955) had demonstrated, 11% of his cases of schizophrenia were separated from their

family, but in 47% this was attributed to their personality which was described as selfish, suspicious and unpredictable. He stated that "the frequency with which the premorbid personality of the schizophrenics was described (by their relatives) in such terms as very reserved, solitary, no friends, no interests, never interested in the opposite sex, always odd and so on was striking."

It would appear that social isolation and living alone in rented accommodation contribute to the aetiology of schizophrenia in those African-Caribbeans who are vulnerable and are also likely to affect their help-seeking behaviour as well.

6.4.4 EDUCATION AND EMPLOYMENT

African-Caribbeans were most likely to be unemployed when compared with the other two groups. Among all the groups patients were 3-4 times more likely to be unemployed than the general population. This is the single most significant finding in the social factors distinguishing African-Caribbean patients from both the white and Asian groups. Unemployment is thus a prime candidate to explain the excess incidence of schizophrenia in the African-Caribbeans in the UK. It is possible that unemployment may be a result of schizophrenia leading to a type II error suggesting that unemployment is causative. As the African-Caribbean respondents had given general employment as a possible cause for their employment, it would appear that their expectations may be higher than their achievements – a discrepancy which has in the past been shown to be associated with mental illness (Parker and Kleiner 1966). Whereas Harrison *et al* (1989) had reported unemployment rates of only 12% in their African-Caribbean sample, these differences may reflect differing time periods over which the data were collected, highlighting changes in the general employment situation over the years, and differing geographical sites may reflect differing occupational trends.

Ullah (1987) has argued that the cyclical nature of unemployment affects ethnic minorities more than the white population and it is possible that this cyclical uncertainty plays a key role in creating additional stress as well as chronic difficulty.

Employment is not only an activity but an institutionalised social relationship (Fryer and Ullah, 1987). Thus employment is a voluntary but institutionally regulated

contracted exchange relationship between two parties - one of whom wishes to sell work and the other who wishes to buy it. Thus there lies within this relationship a range of rights and responsibilities but dictated by powerful social norms and legislation on both sides (Fryer and Payne, 1986). Unemployment leads to unhappiness, high rates of stress, psychiatric disorder, depression, worry and low self-esteem (Campbell *et al*, 1976; Cobb and Kasl, 1977; Rueth and Heller, 1981; Kemp and Mercer, 1983; Jackson and Warr, 1983, 1984).

Socio-economic status prior to unemployment plays an important role in moderating the effects of unemployment. Those who have never worked may present with chronic psychological morbidity and those who had work and then lost their employment may well present with sudden loss, self-blame and inertia. However, those who have held high status jobs are also more likely to have a higher level of support and financial resources, making the loss of their job less traumatic. Prior high involvement in jobs and a belief in one's own competence and skill are likely to be related to higher levels of stress. It is possible that this unemployment affects the individual's self-esteem to a degree where social functioning becomes problematic. Unemployment coupled with pre-existing social isolation and withdrawal and living alone may combine to make the individual more vulnerable to psychotic breakdown in accord with stress-diathesis hypothesis and this may well work as a chronic ongoing difficulty.

Low socio-economic status and schizophrenia have been associated in previous studies and the debate whether it is due to downward social drift or not continues. The possibility that socio-economic structures and processes are related to the occurrence of schizophrenia in a way we still fail to conceptualise should be retained, but more refined research tools will be needed before the issues are definitely settled (Jablensky, 1995).

The stigma of being black, unemployed and dependent on social security contributes to a feeling of rejection and despair. These factors may well contribute to a sense of social isolation and affect individual's performance and are possibly of aetiological significance for schizophrenia. Ullah (1987) demonstrated that for some of his

subjects, being unemployed was simply another feature of being black, in much the same way that bad housing and limited educational opportunities were. Where bad housing and limited educational opportunities and subsequent poor attainment are piled together with unemployment in addition to ethnic status, it is possible that severe psychological stress can produce psychotic illness. However, the question arises as to why the same does not apply to the Asian sample. The Asian community migrated around the same period, for broadly the same economic reasons.

There were two major differences. African-Caribbeans were recruited to help the 'mother country' and they were fully conversant with the language. After arrival, although there were different patterns of concentrations of the two groups, Asians were more likely to settle with other Asians, have their families around them and keep very closely to their culture. Several possible answers can be given to the questions above. First, Asians are more likely to be employed and they have owner-occupied homes which are more likely to be in better condition than poorly maintained and rented council accommodation. Secondly, the social support and individuals around them (if the low EE hypothesis is upheld in this group) will lead to acceptance of their illness and thereby affect prognosis and compliance. Thirdly, the Asian group, especially the younger generation, is more likely to have impressed upon them the value of education and its impact on their life. The fourth explanation is to do with real and perceived marginalisation. As the African-Caribbeans are young, male, and socially isolated, they are more likely to feel marginalised than the Asians the majority of whom live with their families. These factors may act as protective buffers.

In the general population 22% of blacks go on academic courses (compared to 33% of Asians) and 61% attend vocational courses (compared to 50% of Asians). The respective figures for whites are 26% and 62% (ONS 1996). Academic courses include GCE / A Levels, AS examinations, GCSE, SCE, Higher and Standard grades, and vocational courses include NVQ, GNVQ, SVQ, GSVQ and other traditional vocational courses. Thus in the general population, students from white and black groups are more likely to be studying for vocational qualifications and Asians are more likely to be studying for academic courses.

The importance of educational attainments suggest that education may itself indicate not only a degree of support from the peer group but also an element of pressure and expectations. As most of the sample in the present study are young and still in the process of studying, these relationships between ethnicity, illness and educational achievements must be viewed only tentatively.

The onset of illness and gradual withdrawal from educational and social activities suggest that the individual's functioning itself will be affected. An additional way in which educational status may well work is by raising expectations that higher education will improve their chances of getting good and well-paid jobs and open up opportunities for better housing. It is possible that a discrepancy between aspiration and expectations to achieve certain standards and actual achievement may create a sense of loss which may contribute to an individual's poor social functioning. It is difficult to link this directly with the onset of psychosis except in vulnerable individuals.

When compared with the ICMR (1988) sample it appears that the Asians in the present sample are less likely to reach university. Only 12% in the present study did so compared to 21% in the Indian sample. This may reflect different systems of education and ease of attending university in India relative to the UK. Furthermore, in India there are a large number of colleges offering graduate and postgraduate studies which count as university education. However, when compared with the general population of Asians in the UK, the numbers are lower in the patient sample (33% compared to 12%). This may again be linked with the period of onset and long prodrome in the younger age group. On the other hand, as a majority of the Asian sample were older females it is likely that because they got married and were bringing up children and looking after the family they may not have completed their education or did not have any opportunity to do so.

For the African-Caribbeans it is interesting to observe that a vast majority had stopped education at secondary school. This may be related to either a personal or academic reasons for stopping or it may be linked with prodromal symptoms which might have

caused difficulties leading to the drop-outs. As the detailed reasons for the latter were not enquired into, this hypothesis needs to be addressed in future studies.

In summary, this section has highlighted some of the social factors associated with the onset of schizophrenia. The results present a mixed picture. As in some of the previous studies, quality of housing has been shown to be an important factor and interesting trends have emerged from the educational attainments. Employment plays a very important role in adult individuals' lives and the African-Caribbean patients have shown much higher than expected rates of unemployment. Unemployment and social isolation may well represent epiphenomena of the illness rather than as aetiological factors.

6.4.5 FORENSIC HISTORY

ONS (1996) observed that a quarter of young black people reported that they had committed a violent offence compared with less than a fifth among the other two ethnic groups. In the present sample, the Asian patients have the lowest levels of contact with the legal system either in the prison or probation population. It appears that African-Caribbeans and whites are more likely than Asians to have been on probation as well as to have been arrested.

Several hypotheses may be considered to explain this observation. First, it is possible that due to long prodrome of illness individuals are getting themselves into situations where they are likely to get into trouble with the law. The PPHS just covers the actions and does not go into details of problems with the law and details of incidents. Secondly, it is possible that African-Caribbeans are more likely to be picked up if they are misbehaving in public. The latter explanation is less likely because if that were true they would have come into the psychiatric system of health care much more quickly than they did unless the legal system failed to identify their illness. They may therefore be consigned to the legal system. It is also possible that if individuals are misbehaving and their family is around they may well support and protect them and this may lessen the likelihood of getting into trouble with the law. As the study by Commander et al (1997) demonstrated, Black patients are more likely to be violent to the staff, other patients and are also more likely to have sexually assaulted someone - this makes their compulsory detention more likely especially if they live alone and

may not seek help appropriately. Their findings are not from first onset cases whereas in the present study the data are collected from inception cases, which may explain some of the differences.

A quarter of McGovern and Cope's African-Caribbean sample (1991) had had problems with police prior to first admission compared with 21% of whites. In the present study the figures for arrest are 42% and 32% respectively in the two groups. This may again reflect different geographical areas from which the sample was collected. It is also possible that McGovern and Cope may have used different criteria but these are not clarified in their report. Harrison *et al* (1989) reported that 19% of their patients had been in contact with the police, probation services or legal system. Cole *et al* (1995) on the other hand observed that only 15% of their cases had been in contact with the police. However, they also cite other sources of contact in the legal system, such as magistrates and barristers, but do not make exact numbers clear. They argue that in their sample ethnicity did not play a role in the involvement of the police as the first port of call. More confusingly their numbers also include police involvement in taking individuals to the hospital!

There is some evidence in the literature that the legal system may be used in certain circumstances if mentally ill individuals are not being taken to health care systems (Maden, 1993). It has also been proposed that African-Caribbean families appear to cope with mentally ill individuals for a longer period but when the situation deteriorates a rapid response is required, hence the police may get involved. Yet another possibility is that because young African-Caribbeans and whites both use illicit drugs commonly, they may be involved in petty theft and so on to fund this habit. The present study did not collect data from the relatives on the reasons for delay in help-seeking an area that needs to be investigated in future work. As these contacts are broadly similar in the white and the African-Caribbean groups racial prejudice as a possible contributor to previously reported high levels of police contact appears less likely.

In summary, from the limited data it appears that African-Caribbeans and white patients of schizophrenia are more likely to have had contact with the legal system when compared with the Asians in this sample.

6.4.6 ALCOHOL AND SUBSTANCE MISUSE

The PPHS includes a range of questions on alcohol and drug use. One of the problems of linking alcohol or drug abuse with the aetiology of schizophrenia is that individuals may either exaggerate their drinking or under-report drug abuse. Secondly, unless population norms are determined it is impossible to establish a cause and effect relationship between schizophrenia and substance misuse.

ONS (1996), reporting from a youth lifestyle survey, suggested that ethnic minority young people were less likely to use drugs than their white counterparts: 37% white young people admitted ever using drugs compared with 24% of black and only 6% of the Bangladeshi population.

Nearly half of the African-Caribbean patients were either suspected of taking drugs or were believed to be taking drugs by to their informants which compared with 40% of whites. Not a single patient in the present sample had received any treatment for drug abuse which is not surprising because organic damage secondary to substance abuse per se was one of the exclusion criteria as was pathological intoxication. However, there remain several problems with the method of asking for the drug history. Two patients admitted using drugs but their urine drugs screen came back negative whereas one individual denied drug use but his drug screen was positive. It was not possible for the researcher to insist on a drug screen because of ethical problems along with financial constraints as the study was being carried out in two different health districts with different policies for drug screening along with individual clinicians having differing views on the need for drug screening.

According to the information from the history, the African-Caribbean group had the highest proportion of drug users and also the lowest number of those not yet taking drugs. However, this figure was broadly similar to that for whites.

Harrison *et al* (1989) reported that their black patients (24%) were more likely to have used illicit drugs in the year before the first contact than their white sample. They argue that the proportion of African-Caribbean patients who had admitted to the use of cannabis was broadly similar to that reported by Burke (1974) from Jamaica. The present study confirms similar rates for both for whites and African-Caribbeans. In the ICMR study 10% of Indians had been reported to use drugs regularly, of which cannabis was a common one. The numbers among Asians in the present study are lower, which may again reflect the older age group and female gender of the respondents.

Without knowing the actual numbers of users in the community it is difficult to state whether drug abuse plays a role in the aetiology of schizophrenia but the present findings do not suggest that drug abuse is a plausible explanation for the high incidence of schizophrenia in African-Caribbeans. The role of drugs in schizophrenia (apart from amphetamines) remains a controversial one. Thornicroft (1990) has suggested that cannabis can produce brief psychosis in clear consciousness, and that heavy users have an increased risk of developing schizophrenia in the subsequent 15 years, and he went on to state that there was no convincing argument for cannabis psychosis. Andreasson *et al* (1987) demonstrated that the relative risk of schizophrenia among high users of cannabis (more than 50 occasions) was 6 (C.I. 4.0-8.9). Disturbed conditions of upbringing and poor adjustment in school were linked with onset of schizophrenia. Their reliance on questionnaires for information and lack of clarity on duration of cannabis exposure make these tentative findings. Some authors, Andreasson *et al* (1989) showed that the relative risk of schizophrenia among cannabis users in Stockholm was 4.1 (C.I. 1.8-9.3) compared with non-users. The numbers were small and they were unable to ascertain personality traits. They reported a different pattern of mental deterioration with a more abrupt onset. It is not clear from their data whether these individuals had a pre-existing psychiatric disorder or not. These individuals were also more likely to use other drugs hence the causal effect can not be accurately established. In the absence of any firm data about cannabis use in the respective populations at risk, it is difficult to be certain of the significance of these findings. Causal association remains difficult to prove with the present data. This aetiological hypothesis remains an open question, but there is no

suggestion from our data that cannabis consumption could account for the high rate of schizophrenia in African-Caribbeans when compared with whites.

Asians were more likely to be abstainers from alcohol than either of the other two groups, though figures for occasional use are not dissimilar across the groups. The white group is more likely to use moderate amounts of alcohol but the serious use of alcohol is broadly similar in both Asian and African-Caribbean groups. Jablensky *et al.* (1992) reported that a history of alcohol abuse in the year preceding the first contact was given for a total of 57% of the male patients. Harrison *et al* (1989) too had reported that in their sample, only 2.5% of African-Caribbean patients had had serious alcohol abuse. Cochrane and Howell (1995) found that African-Caribbean men were less likely to have drinking problems when compared with white men and they were also far less likely to have personal and social problems. They suggest that lower levels are linked with their religiosity. The data in the present study go some way towards confirming their findings.

In summary, drug abuse has been shown to be higher in both African-Caribbean and white groups compared to Asians. This may reflect sex differences as well as cultural attitudes to illicit substances. Alcohol abuse, on the other hand, tends to be lower in the African-Caribbean group. The contribution of these substances to the aetiology of schizophrenia remains unclear, but is unlikely to explain the high inception rates of schizophrenia in the UK African-Caribbeans.

6.4.7 SEPARATION FROM PARENTS

This is the first study to address the issue of separation in childhood from one or both parents in the patients from three ethnic groups with a diagnosis of schizophrenia. It is clear that historically when husbands and fathers migrate for economic reasons usually they go by themselves leaving family and children to follow later. This may sometimes take years, although in some instances impending changes in immigration laws have precipitated this move and families have been brought over sooner than expected.

In African-Caribbean families often the children have been brought up by the grandmother when mothers have been working and fathers have been away (Smith

1978). Interestingly it has been argued that the traditional family structure in the Caribbean countries has been led by women with men away working at the plantations (Olwig 1981, 1985). Thus it is not surprising that the African-Caribbeans have the longest periods of separation from their fathers and are also the group most likely to experience these. The causal relationship with adult schizophrenia remains a matter for conjecture. The separation from parents in the patient group must be compared with the controls or base population. The method here is not robust enough to confirm this and case control methods need to be used for confirmation.

In addition to difficulties experienced in not having a male role model and parenting experiences which may contribute to problems in development of personality and relationship formation, biological factors may also play an important role in contributing to development of stress. With a single-income family there may be financial hardships which can affect nutritional and dietary patterns. Long-term follow-up of these children on a number of parameters could shed light on some of these factors which may contribute to the aetiology of schizophrenia.

Children separated from both parents and then brought into a different society and culture may well feel alienated, unwelcome and unwanted. At least one female African-Caribbean had mentioned this in her interview. She felt that after her arrival in the UK there was little support for her while both her parents were working. She did not know anyone else and took a long time settling in at school. From a first class student in the Caribbean her grades fell and she was picked on by other students and bullied. All these factors led her to question herself and her parents constantly about the reason for them bringing her over. She maintained that she had a very close relationship with her grandmother who had brought her up. She missed her as well as her close friends in a country where there was nothing unusual about her, i.e., where she was not seen as black. These experiences are not unique. Separation from parents may affect an individual's development as well as ability to form relationships, which in turn may contribute to a large number of African-Caribbean individuals living alone in relative social isolation.

In summary, early separation from one or both parents may well act as a vulnerability factor for schizophrenia as it does for depression. More detailed work needs to be done, especially on the interaction between premorbid personality, separation and illness.

6.5 SYNDROME PROFILES AND PATHWAYS

Syndrome profiles of schizophrenia across the three groups suggest more similarities than differences.

The white sample presented with symptoms of worrying, followed by loss of interest, sexual and fantastic delusions as well as delusions of reference in narrow definition schizophrenia. In the non-S schizophrenia sexual and fantastic delusions were common. Two observations need to be highlighted here - first, the psychological and social consequences of delusions need to be looked at especially to understand any ethnic or cultural differences. Secondly, clinicians should pay more attention to cultural and ethnic differences in presentations of delusions. McCreadie (1992) reported that 45% of the patients had flatness of affect followed by retardation, poverty of speech, anxiety, delusions, depression, incoherence of speech, hallucinations and incongruity of affect, in descending order of frequency. Flatness of affect was common in the African-Caribbean sample in the present study in the non-S sample when compared with the other two groups.

In the IPSS (WHO, 1973) sample 15% of patients had anxiety, tension and irritability. The present study shows a higher figure. There are many possible explanations for this. First, it is possible that the psychotic symptoms make an individual more anxious and stressed. Secondly, the IPSS figures may have been artificially brought down due to pooling of data across various centres. Thirdly, it is probable that individuals have a more affect-laden illness, which appears less likely if one looks at the diagnosis in the whole group. Fourthly, worrying and anxiety are non-specific neurotic symptoms which are lower in the pyramidal hierarchy constructed within the PSE, as described in the Section 4.5.1.

Asians, on the other hand, had worrying and delusions of reference as two common symptoms in cases with narrow definition schizophrenia. When compared with the

ICMR (1988) findings, these symptoms occur more frequently in the UK sample. ICMR (1988) had reported 30% of their sample to be worrying and 49% to have delusions of reference (broadly similar to 49.6% in the IPSS data). It is possible that Asians like other minority ethnic groups feel more sensitive and "got at" - hence the frequency of symptoms. However, heterogeneity of the small sample needs to be emphasised. A minority may feel persecuted, especially if the social and political climate encourage such behaviour in members of the majority community. In this group, hallucinations and hysterical symptoms were more common in the S+ group but were lower than the figures reported in the ICMR (1988) study. This suggests that hysterical symptoms may well be disappearing in this group after migration.

Leff (1988) has argued that hysteria is disappearing in populations in developing countries: it is possible that a similar process is at work for Asians and African-Caribbeans who have migrated to industrialised countries. Using qualitative research methods such as descriptions and focus groups detailed changes in the patterns of behaviour and presentation may be studied.

The ICMR (1988) data suggested that only 31% had hallucinations but the figure went up to 47.9% in the Madras sample. Asians had the lowest figure for religious delusions among the S+ patients across the three ethnic groups in the present sample - 7%, not dissimilar to 9.6% reported by ICMR (1988). This group also has the lowest non-specific symptoms, once again belying the expected trends. Persecutory delusions were observed in one-third of the S+ sample when compared with the ICMR figure of 50.5% and IPSS (WHO, 1973) figure of 51.8%. This is a surprising finding in that the migrant sample would have been expected to have higher rates of persecutory delusions. However, the Asian sample also had high rates of delusions of reference. This discrepancy in symptoms may reflect underlying cultural influences and the impact of migration in determining the presentation of symptoms.

In the narrow definition schizophrenia group a high proportion of African-Caribbean patients showed worrying, tension and irritability and in addition slightly more than one-third had simple depression. Once again, delusions of reference and persecution were common and no visual hallucinations were reported, although one-third had

olfactory hallucinations. It is possible that some underlying organic causation may well produce olfactory hallucinations - a phenomenon not previously studied in depth in the two minority ethnic groups. One third of patients in the African-Caribbean sample had "simple" depression which may also account for their social isolation, difficulties in relationships, problems in gaining employment and general withdrawal. The relatives confirmed that African-Caribbean patients were more likely to be socially withdrawn, and their mental state was also put forward as a possible cause for unemployment. Hence it is possible that social withdrawal and prodrome of schizophrenia along with restricted affect may encourage individuals to withdraw from any kind of social interaction therefore making help-seeking slower and more difficult. This group also had a more insidious onset of symptoms and perhaps because of this its members were more likely to have no clear concept of the problem thereby adding to the delay in help-seeking.

Minority group individuals may be reflecting their own vulnerability to the majority population in the way their symptoms appear. Benedict (1934) considered that cultures have certain values which characterise what she called "the psychopathology of that culture". She argues that one of the most misleading conceptions due to dualism practiced (differentiating between the society and the individual) was the idea that what was subtracted from the society was added to the individual. In reality society and individuals are not antagonists and the individual's culture provides the raw material of which the individual makes his life. Thus symptoms of different illness across different cultures have to be studied in order to understand the impact of the same set of events in the genesis of the symptoms.

Secondly, it is possible that a premorbid sensitive personality may trigger delusions of reference. The informants in this study did report suspiciousness in 42% of Asian cases and more than one-third reported a lack of self-criticism and a quarter a feeling of being picked on, which would fit in with the premorbid sensitive personality. If the premorbid personality determines the set of symptoms these trends would be useful markers in identifying individuals likely to develop schizophrenia but may well prove to be non-specific.

Murphy *et al* (1974) had observed that social withdrawal, emotional withdrawal, auditory hallucinations and delusions were the commonest and most consistent symptoms in cases of schizophrenia but the ordering of these symptoms across different societies and cultures varied accordingly to some (undefined) social or cultural schema. They argued that the basic schizophrenic process can be affected by the culture but the individual's personality reacts to that process at an individualistic level. Thus the distinctions in presentation can be considered at two levels - a macro level, meeting with Benedict's criteria for understanding the psycho-pathology of the culture, and at a micro level of studying phenomenology at an individual level. Although Kino (1951) had reported symptoms of a paranoid and suspicious nature in immigrants, the suggestion was that these needed to be differentiated from schizophrenic illness. Loneliness, external difficulties and social maladjustment will bring on a depressive mood which may falsify perceptions and judgement. Persecutory delusions, feelings of isolation and ideas of jealousy are reportedly commoner in (refugee) immigrants (Eitinger, 1959), a finding supported by the present data. Similar findings are reported by Copeland (1968) (see also Murphy 1982). The odd behaviour which may reflect internalisation of psychic disturbance and becoming dangerous, assaulting others and being violent to others as reported by Commander *et al* (1997) is also present in a sub-group of the present sample especially in the African-Caribbean group (where 77% of the sample were reported to be demonstrating odd behaviour as a cause for help-seeking).

Another interesting observation to emerge from the present data is a low figure for religious delusions among the Asian sample. The low number of religious delusions in the present study may indicate a changing pattern over time. The Asians are most likely to show an increase in their religious activity. It suggests that either religious activity and formation of delusions are completely unrelated or that there is another mechanism at play. It can be hypothesised that increased religiosity may be sought as protection to keep away the "evil eye" and other religio-magical explanations that the Asians are trying to follow. Asians generally cite external factors as part of their explanations of their illness as Bal and Cochrane (1990) have demonstrated. Thus it makes sense that Asians use religion in seeking help and their illness experiences may increase their religious fervour. This needs to be tested in prospective studies. It is

also possible that the questions asking for religious delusions within the structure of the PSE are inadequate. As the ICMR (1988) had reported, a higher proportion of patients had religious delusions (15% overall) than in the present sample. The pattern observed here may reflect a changing syndrome or the exposure of Indian individuals to British culture, which places less emphasis on religion. Some evidence of difference in rates reported across religions comes from Mauritius (Raman and Murphy, 1972). It is possible that religion may play some role as a protective factor.

In addition, early manifestations of abnormality as identified by the informants matches the feelings of persecution picked up on the PSE. Feeling persecuted was reported by 21 out of 38 African-Caribbean patients and odd behaviour as an early manifestation of abnormal behaviour by informants in 77% African-Caribbeans may be seen as an extension of that persecution. Feelings of persecution and isolation are suggestive of contributing to developing schizophrenia in some cases. It is also clear that among the African- Caribbeans two additional factors may influence this sense of isolation and alienation. First, as identified by the relatives as one of personality traits, emotional withdrawal is an important factor, reported in 30% of cases. Secondly, this group is also more likely to be living alone and living in rented accommodation (with a degree of insecurity which was not measured) and not having a close confidant. Thus the pervasive sense of isolation and withdrawal may well contribute to persecutory feelings and lead to odd behaviour. The finding that in this group the individuals were emotionally cool, gloomy and socially isolated suggests that the syndrome may have more affect-laden symptoms, a finding which needs to be confirmed.

These observations have not been reported from the Caribbean, thereby making it likely that when minority ethnic groups live in a majority culture which may be less than welcoming and experience marginalisation, they may respond with feelings of persecution. A lack of similar findings in the Asian sample may suggest that as a majority of the sample lived in close communities this sense of alienation and marginalisation may not be as pervasive or persistent. This may also link with the finding of an excess of older females who, because they are older and married and valued within the family or their community the sense of marginalisation (say,

compared with African-Caribbean males), will not be the same. In societies and cultures where the notions of the self are socio-centric rather than ego-centric the individuals may feel protected in dealing with stresses.

To summarise this section, it appears that persecutory and paranoid delusions are common in the African-Caribbean sample and the delusions of reference are commoner in the Asians. The religious delusions are not as common as predicted previously.

6.6 EARLY MANIFESTATIONS, PERSONALITY TRAITS AND PATHWAYS INTO CARE

In spite of the small numbers and limited information on personality traits some interesting trends emerge on the relationship between the early manifestations and the pathways used by the patients and their carers. Although early manifestations were broadly similar across the three groups, odd behaviour as reported by the informants was the commonest reason for contact with services for the African-Caribbean group and threat to others was also a common reason in this group. As noted earlier, such a presentation, linked with persecutory feelings, will lead to urgent help-seeking. This group was also least likely to present with self-harm, though as likely as the white group to seek admission. However, Asians were reportedly the most likely to commit assault. Unlike previous suggestions (ICMR 1988), no Asians presented with physical illness, thus ruling out somatic or hypochondriac preoccupation. This is surprising, because with acute psychosis one would expect a large proportion of individuals to have physical symptoms or physical illness. Asians were more likely to show irritability and more likely to wander off to other parts of the country. It is of course possible that, because Asians lived with family, their irritability and absence was more likely to be noted. They were also most likely to behave as if they were hearing voices. This fits in with the suggestion of Murphy *et al* (1974) that hearing voices is also likely to be seen as abnormal enough to prompt help seeking. This, coupled with incomprehensible talk, suggests that odd behaviour becomes more likely to be identified as such and help sought. Thus a symptom-complex of odd behaviour, looking frightened, claiming that they can do and achieve unlikely things begins to emerge.

Pathways to care are determined by a number of factors such as symptoms (type and severity), presence of others or carers, whether there is acting out of symptoms in public places, and knowledge of health care systems and services as well as beliefs about illness. Thus the differences across the three ethnic groups can be studied at all these levels. As patients and their carers' knowledge of health care systems and services are not identified in this study, one has to rely on type and severity of symptoms; isolation versus living with others; and acting out because of psychotic experiences while determining pathways into care.

As noted earlier, one of the earliest manifestations was a change in religious activity - either an increase or a decrease, especially among Asians when compared with the other two groups. There is some anecdotal evidence from India and the Indian Diaspora elsewhere in the world that individuals are more likely to change religions and their religious activity increases or decreases in the period prior to the development of schizophrenia. There are two possible explanations. One is that the individual feels vulnerable and is looking for some kind of stability, hence the need to look for alternative sources of support. Secondly, these individuals may be trying to make sense of their psychotic experiences by looking for alternative explanations. It is of course possible that religion plays a very important role in their lives and the factor which is more likely to change in the context of support (i.e.. they are more likely to receive support from the religious congregation and friends going to the same place and their religious leaders) compared with other social sources like family and acquaintances who may not be around or available. Without measuring premorbid religiosity, religious interest and religious activity, it is difficult to know the exact role such activities play and how these change as a result of their illness.

There is another possibility in trying to understand the role of religion. The Asian society is sociocentric where the concept of individual's self is very much related to the family, kinship and community hence any helpseeking may well lead to sociocentric ports of call such as religious leaders. Furthermore it is also possible that their relatives and friends may guide these patients towards religious settings for support in the first instance.

When asked about pathways Asians were more likely than the other two groups to have sought out priests or traditional healers. This is probably an underestimate because Asian subjects may not have liked to admit their use of religious and traditional facilities to the interviewer (although he was Asian, he had medical status and hailed from a Western psychiatric institution). In a focus group, Punjabi women had acknowledged the symptoms that constitute depression but saw no role for the physicians, identifying priests and religious leaders as an appropriate first port of call (Bhugra *et al*, 1997). This needs to be confirmed with the diagnosis of psychoses especially schizophrenia. In the present study, the pathways for care in two illnesses ie. depression and schizophrenia may well differ but the distinction between the two needs to be confirmed in that firstly Asian community members are well able to distinguish the two conditions and secondly their understanding of role of religion in other psychoses needs to be studied. At least one Indian patient had experienced psychotic symptoms for years and saw these as religious experiences and would go on annual pilgrimages to various holy places in India but sought help only when the oldest child, who had been the linchpin in the house, left home.

It is likely that both patients and their relatives may be reporting a premorbid trait of reduced capacity to endure stress if they see stress as a possible contributor to their illness. These factors need to be teased out in future research, for example, collecting qualitative data using case illustrations to see how these individuals will cope with stress. These traits may be post-hoc justification on part of the informants rather than an accurate representation of the premorbid personality.

For first contact, Asians were more likely to consult their general practitioner and least likely to become involved with the police. This is in marked contrast with the sample of Punjabi women who would not want to see their GPs for symptoms of depression. The symptoms are likely to dictate the pathways that patients and their carers take. If the individual has pre-existing social withdrawal, lives by himself, has limited social contact with the family and no close confidants, and experiences an insidious onset of illness over a number of months, they are less likely to see their general practitioner. Hence contact with services is more likely to be compulsory and they are less likely to be treated at home. The family will play a role in seeking help

and in whether statutory agencies or coercive measures like the police are employed. As Gourash (1978) suggests, in times of illness, people will turn to their natural support systems first. Both at a personal and familial level, if religious or magical factors are seen as causative, help will be sought initially from these sources rather than medical agencies. Neighbors (1985) reports from the USA that American blacks use traditional health care sector and informal support rather than the mental health care system. This is an area which needs to be investigated further in identifying models of care and pathways into care.

6.6.1 COMPULSORY ORDERS

Various studies had previously suggested that African-Caribbeans were more likely to be admitted on a detention order, either a police place of safety order (section 136 in England and Wales) or an assessment or treatment order (Littlewood and Cross, 1980; Dunn and Fahy, 1990). However, Dunn and Fahy (1990) refer to all admissions and not first admissions. The present study does not uphold these findings which may reflect the fact that the numbers are small, and secondly that the study is confined to first contacts. These patterns may change in subsequent contacts.

It is likely that odd behaviour, behaving as if hallucinated, and threat or assault are more likely to draw relatives' and observers' attention and more likely to require emergency contact and treatment. However, in the present study, the number of African-Caribbeans admitted on a section is not as high as previously reported (Dunn and Fahy 1990). There are two possible explanations for this. First, the rates of sectioning among African-Caribbeans may have not increased at all but remained steady and the other groups are catching up with them. This is unlikely to hold because the overall population sectioned is 28% when compared with 50% reported from inner city areas. The second possibility is that the services - health, social and justice - are more aware of the problems of discrimination and difficulties in diagnosis and are more likely to persuade African-Caribbeans to come in voluntarily so that the patterns of diagnosis and management are changing. Harrison *et al.* (1984) reported that African-Caribbeans were more likely to be admitted from a public place via a police station with little involvement from their general practitioners.

Higher levels of hostility among both white and black patients may well lead to involuntary admissions. Another possibility is that in the first admissions the rates are not markedly different but poor compliance by the African-Caribbean patients may lead to high rates of compulsory admission in subsequent admissions. The rates of compulsory hospitalisation are affected by social isolation, limited social contact, slow onset and a range of insidious negative symptoms as observed in the present study. The overall rates of compulsory admission in the present sample are not too dissimilar across the three groups.

This may reflect increasing sensitivity of clinicians, better training as well as availability of alternative sources of help. The low rates of sectioning in Asians in contrast with the report of Thomas *et al.* (1993) study may reflect two different geographical sources of data collection. They had suggested that high rates of sectioning may be a reflection of re-admissions. As the present study deals with first contact only, this may be the explanation for the discrepancy. The presence of a carer to negotiate the pathway may be another key factor in explaining the avoidance of compulsory admissions. Another factor in compulsory admission is odd behaviour as noted by the observers. Such odd expressions or behaviours in public places are likely to attract attention of the statutory services either through the police or the social services.

6.6.2 PATHWAYS

In view of the small numbers it is difficult to be certain but the type and severity of symptoms, mode of onset and type of help-seeking (ie. GP as the first contact) are all broadly similar in the three groups. This study does not uphold the findings of McGovern and Cope (1991), who found that in their second generation African-Caribbeans, the sections rates were high and the patients more likely to be single and living alone. In the present study the latter two factors are confirmed but not the former. Their data were collected over a four-year period from 1980 and it is likely that although the actual processes of sectioning may not have changed clinicians may have become more sensitive to the process. This changed sensitivity is further borne out by the findings of Lewis *et al* (1990). When they asked a random sample of British psychiatrists for their responses to a series of case vignettes for some of which the ethnicity of the patients had been changed, they found that schizophrenia was

diagnosed less often in African-Caribbeans, refuting the claims that psychiatrists tended to overdiagnose schizophrenia.

Cole *et al* (1995) observed that compulsory admissions occurred for 31% of their patients - a figure not dissimilar from the present study. They found that their black patients (a broader category than African-Caribbeans) were more likely to be sectioned, and compulsory admission was related to living in public housing, living alone and not being involved with a general practitioner. Davies *et al* (1996) suggested from a period prevalence study that black Caribbean and black Africans were more likely to have been admitted to a psychiatric care facility or prison. Direct comparisons with their data are not possible because they were reporting on previous contacts as identified from the case notes.

Gater *et al.* (1991) had reported from a multi-centre study that pathways to centres relatively well provided with psychiatric staff were dominated by general practitioners, whereas relatively less well provided centres showed a variety of pathways, with native healers playing an important part. In South Manchester, Gater and Goldberg (1991) found that non-medical sources of referral to psychiatrists accounted for only 2% of new cases. However, there are differences between their sample and the present group. This sample is first onset only and pathways were identified using the PPHS and not the Pathways into Care instruments.

McGovern and Cope (1991) had found that in their sample, African-Caribbeans were less likely to enter the psychiatric care system through their GPs. The present study confirms these trends. It is possible that the basic difficulty in inner city areas is accessing the single handed GPs, who may either be too busy or not aware of local community based services. In addition the role of the symptoms needs to be studied. In situations where odd behaviour is prominent, especially in public places, individuals are more likely to be picked up. Thus those who are single and living alone with only limited contact with family and friends may continue to experience symptoms over a long time before coming into contact with psychiatric services.

In the present study, the mode of onset was sudden (i.e., less than one month) in nearly one-third of whites and around one-fifth of the other two groups. This is again a surprising finding. Previous studies from India have suggested that cases with acute onset are commoner and acute onset has been linked with better prognosis (ICMR, 1988). On the other hand, African-Caribbeans are more likely to have an insidious onset, which may reflect poor prognosis. This also confirms McGovern and Cope's (1991) finding that their African-Caribbean sample were more likely to have had a longer period of symptoms prior to seeking help. In the present study the focus is on one-year outcome rather than the duration of admission, hence direct comparisons are not possible. However, the present data do not confirm Littlewood and Lipsedge's (1981a,b) observation of acute onset in African-Caribbeans. The better prognosis in the Asians may have its explanations elsewhere rather than in the method of the onset of their symptoms.

To summarise this section, it appears that symptoms of schizophrenia differ in some aspects across the three ethnic groups. Whereas there were no age or sex related differences, the mode of onset and models used for mental illness determined how family members sought help for their mentally ill relatives. The role of individual symptoms needs to be studied in depth. It must take into account the way in which symptoms develop and lead to contact with various services.

6.7 CONCEPTUALISATION OF ILLNESS AND HELP-SEEKING

As mentioned earlier, the process of help-seeking and the pathway into care will be determined by the individual patients and their carers, by the models of illness they follow and the way mental illness is conceptualised.

The African-Caribbean informants were more likely not to have formulated a concept of their condition and were also more likely to see the behaviour related to their illness as indicating that nothing was wrong. Only half the sample saw the symptoms as mental illness. It would appear that their models of mental illness differ on several counts. Firstly it is possible that a wider range of behaviours is accepted as normal than in other ethnic groups. From work done in the Caribbean it appears that some of the abnormal behaviour and the use of illicit substances may be seen as not pathological. This needs to be confirmed in future studies.

This "normal" perception of abnormal behaviour may contribute to a delay in seeking help and is also more likely to keep things under wraps until the behaviour gets out of control and urgent help is required. When the urgent help is not forthcoming from health services, the police get involved and patients and their carers may hold resentment against the health services for the delay in providing help. This could in turn affect compliance and eventual prognosis. The differences in compulsory admissions are not significant across the three groups but it is likely that coercive interventions become even more important in subsequent contacts. It is also likely that such a view of symptoms as well as of health services is correct and acceptable in a cultural context and the role culture plays in this process of help-seeking is more important than previously thought.

The explanations given by agencies to informants may confirm their preconceptions and preoccupations. It will be useful to compare their views with the teams' views to ascertain what information was given to them.

Interestingly, Asians were more likely to conceptualise in religio-spiritual models and even the external agencies were more likely to give them magical or religio-spiritual explanations, although the numbers are small. Compared with the white and African-Caribbean groups, Asians are least likely to see the problem as mental illness, thereby suggesting that clear differences exist across various ethnic groups in the way mental illness is perceived. However, as the present data do not ascertain detailed models of illness by collecting qualitative and descriptive data, the relationship between these models and help-seeking must remain conjectural. Bal and Cochrane (1990), in a general practice survey, had observed that Asians held more non-biomedical beliefs and psycho-social and personal factors were held responsible for aetiology. Yet these beliefs did not preclude them from seeking treatment or from their accepting its efficacy. In the present study, Asians blamed their social environment and yet did not see family life as contributing to the illness. This may reflect that as informants were by and large members of the family they were less likely to see themselves as blameworthy. Sensky and Baumann (1994) have suggested that Asian lay people were very likely to attribute psychological problems to troubles in the family. This

finding is understandable that if family is seen as an important source of individual's identity the family conflict tends to take on a bigger role in the perceived aetiology of any psychological disturbance. This external locus is an important feature of explanations as well as in seeking help and needs to be investigated in prospective studies.

Help-seeking among Asians remains pluralistic - they, like their counterparts in the Indian subcontinent, use several sources of help and have several different types of explanation for illness without any conflict arising. Heredity and family biological functioning played a limited role in the genesis of patients' problems according to the Asian group in the present sample. Asian families may well have a view of the patient's threatening behaviour and accepts it easily. The family's expectations of the individual and the explanations used for the odd behaviour or illness play an important role in setting the scheme for support and help-seeking. Reduced levels of face-to-face contact as well as low Expressed Emotion as demonstrated in Chandigarh (Wig *et al.* 1987a, 1987b; Leff *et al.* 1987) affect prognosis. The EE measure taps a range of attitudes and behaviours referring the family's response to disturbed relatives. These attitudes change with the changes in the illness. It is obviously possible that at the first onset, attitudes, beliefs and knowledge of the illness are different from the subsequent ones. Wig *et al.* (1987a) showed that relapse rates were low but were associated with persistent hostility. Beneficial family structures and traditions may prove to be key factors in the good outcome regularly reported from developing countries. Both these possibilities need to be confirmed in prospective studies.

The African-Caribbean informants blamed substance abuse especially cannabis for the genesis of the problems in the patients. They were also most likely to hold the patients partially responsible for their conditions. Interestingly, African-Caribbean informants in the present study were also more likely to blame lifestyle along with family life as important causes of patients' current problems. It confirms the findings reported by McGovern and Hemmings (1994) that the African-Caribbean relatives were more likely to see substance abuse as a cause of the problems/symptoms. As these authors argue, it is possible that this may reflect their own experiences, as

cannabis has been used more widely and for longer in the Caribbean than in Britain. As it has been consumed as both a recreational and a medicinal substance the individuals may well have more experienced opinions about its effects. They also hypothesised that, in their sample, mental health professionals may have told the families that cannabis was responsible for the illness but in the present sample this appears to be an unlikely explanation as none of the respondents reported this as an explanation by professionals. The present data do not support McGovern and Hemmings' (1994) findings that only 15% of their African-Caribbean sample blamed lifestyle, although Harrison *et al* (1989) had reported a higher figure. These differences may be explained due to different time periods and differences in sample collection in different geographical areas.

An additional factor originally proposed by Faris and Dunham (1939) is worth considering. They suggest that "silliness is a sign of abnormality only when it is inappropriate to the social situation. The willingness to be silly when others are solemn or indifferent may be merely a sign that a person is reclusive or isolated enough to be indifferent to the opinions of others." Thus odd behaviour may be a result of social isolation rather than the other way round. This clearly needs to be studied further. However, a link between social isolation and odd behaviour cannot be underestimated, thereby affecting help-seeking.

Littlewood (1988) saw causation of "madness" in the Caribbean in personalistic terms brought out by *Obeah* (magic) or some form of psychological or social stress such as loss, worry or overwork. In the present study the respondents among the African-Caribbeans reported family life, lifestyle character and substance abuse as important factors. Thus Littlewood's hypotheses are not upheld although individual variations in such a small sample may not adequately encompass psychological or social models. Interestingly no one put forward magic as a possible explanation. This may again reflect the fact that the findings were collected from a younger age group among the African-Caribbeans. It is possible that, as the data were collected from Western style psychiatric facilities, the individuals were less likely to come forward with (what might be seen as) unscientific explanations.

With regard to the explanations given by outside agencies to patients and their informants, it appears that whereas African-Caribbeans were more likely to say that they were given no explanations - a finding similar to that reported by Commander *et al* (1997), Asians are the least likely to say that they were told the individual had a mental illness. They were also more likely to acknowledge that they were told something was wrong but this was non-specific. It is possible that the African-Caribbeans were not told anything due to either clinical practice or an underlying assumption that this group were not familiar with "medical models" and did not want to know what was wrong. It is also possible that these individuals were given the information but either they were unable to take it in due to medical jargon being used or did take it in but could not then remember whether they had been given any information at all.

With the Asian group, three explanations are possible. First, it is likely that because of language barriers especially if the information was given in the second or third language and no written information was given, they may not have taken it all in or were given information in a medical, jargonistic way. Secondly, it is possible that they did not understand the information even if they understood the language due to the stress of the individual being in hospital and their own concerns. Thirdly, the Asian sample had more older females, who may follow a different model of illness, highlighting other explanations, and they actively chose to ignore what information was being given to them. The latter explanation is also possible for the responses of the African-Caribbean group. When McGovern and Hemmings (1994) re-interviewed their first onset African-Caribbean cases of schizophrenia diagnosed from the case notes and using similar PPHS measures, they found that among both African-Caribbeans and whites the proportion of relatives believing mental illness to be an explanation were broadly similar. In the present study the proportion of whites agreeing with it is broadly similar to the McGovern and Hemmings data but their proportions of Asians and African-Caribbeans are lower. This may reflect different sampling strategies. The present sample includes first contacts and the interviews were conducted within the first four weeks of the onset. Their sample was first onset but these interviews were conducted 5-7 years after the onset of symptoms and the first contact. It is possible that subjects' and the informants' beliefs and

conceptualisation of the illness behaviour changed following repeated contact with psychiatric services and regular contact with nurses and other health professionals.

Conceptualisation and pathways to care are linked. In contrast to previous studies, African-Caribbean patients were as likely as other ethnic groups to present to their GP as their first source of help. In addition, lower than expected rates of sectioning in this group suggests that the patterns of help-seeking are beginning to change or that the differences appear after the first admission. This is upheld by the data presented by Cole *et al* (1995), who reported that sectioning was related to social isolation and not ethnicity. The present data confirm this. Like Harrison *et al's* (1997) observations, a majority of this sample had first contact with their general practitioner, again suggesting that the pathways into care are beginning to change across ethnic groups. The community services in the Ealing Health District have been well advanced for a number of years when compared with South Southwark but the fact that by third contact virtually everyone had been seen by the psychiatrist suggests that patients and their carers, having identified psychosis as a problem (irrespective of their own personal models), tend to seek out psychiatric help.

In summary, it appears from the data that Asians hold non-biomedical concepts of illness and they are more likely to seek out non-medical sources of help, whereas African-Caribbeans are more likely to report that they were not given any explanations by the health care providers which may well increase their resentment and contribute to their disenchantment with services and affect future contact as well as compliance.

6.8 CONCEPTUAL MODEL OF AETIOLOGY OF SCHIZOPHRENIA

From the present research several strands which could contribute to the inception rates of schizophrenia begin to emerge. For the African-Caribbeans, early and prolonged separation from father, living alone in adulthood and not having close confidants have been identified as possible factors in the aetiology of schizophrenia. Unemployment remains a key candidate in contributing to the genesis of illness and remains to be studied carefully. In addition to assessing rates and reasons for unemployment, these studies must compare these with the rates of unemployment and its impact on the general population as controls. The role of unemployment in affecting self-esteem

and as a chronic difficulty need to be studied. In addition the role of the unemployment and other social factors like housing need to be studied at the time of inception as well as at the time of follow-up. For the Asian female, older age of onset appears to be a significant finding.

Concepts of the self and self-esteem have been used in social psychology for a considerable length of time. However, the agreement on definitions and its measurements remains elusive. The 'self' as a concept remains confusing and although identity and ego have been used as describing the inner or essential nature of mankind (Rosenberg 1979). The distinction between self as an object of the person's own knowledge and evaluation and as a subject or agent is not dissimilar to that already discussed in chapter 2 on ethnic identity and its ascription. Ethnic identity is only one part of the concept of the self. Unlike ethnic identity, however, self can be both subject and object.

When we use the term self-concept, we mean the totality of the individual's thoughts and feelings having references to himself as an object. This is not the concept for the real self but a picture, a perception and an observation. Although self has been used as ego-identity (Erikson 1959) this is a conscious sense of individual identity. Hence self-ascription becomes even more relevant in trying to understand identity.

The contents of the self-concept include social identity (which includes age, sex, race, nationality, religion, family status, legal status) which then gets expressed in categories. The individual society may grow so big that individuals may break off into smaller membership groups. The third aspect is based on social labelling. Other aspects of social identity include categories affecting life in a myriad of ways such as being an ex-convict or eminent professor. These social types are perceived as characteristics. The final component of the social identity is personal identity which is used to refer to individual's deepest thoughts and wishes. It is more importantly a matter of social classification by giving the individual a unique label (such as name) which could be as complex as needed.

The self-concept emerges and develops gradually primarily out of social experience and may well have very abstract qualities. The significance of a particular component depends upon its location in the self-concept structure whether it is peripheral, cardinal or secondary. The self attitudes include self-confidence which refer to the anticipation of successfully mastering challenges or overcoming obstacles whereas self-esteem implies self-acceptance, self-respect and feelings of self-worth. A person with high self-esteem is fundamentally satisfied with the type of person he is, yet may acknowledge his faults while hoping to overcome them. Self-esteem uses both positive and negative evaluations of the self and is not to be confused with self-confidence.

Societies which incorporate into their institutions and value system that maximum autonomy consistent with social control be permitted are likely to foster high levels of individuality and such an approach is likely to affect concepts of the self and self-esteem. There are emotional reactions which are unique to the self and yet these have to be seen in the context of the individual's interaction with the society as a whole. The concepts of self are not fixed and rigid, just like the concepts of ethnic identity – self-esteem and self-consistency in relating to the social normus is affected by the larger society.

Bednar et al (1991) suggest that self-concept is integral to the individual implicitly including cognitive-affective structures about one's self that determines and creates the meaning of an individual's experience. Current concepts of the self are multi-faceted conceptualisations. Masterpasqua (1989) argues that the self is the essential component in a movement toward considering competence (defined as adaptive, cognitive, emotional, behavioural and social attributes related to beliefs and expectations) as the goal of psychological health. Although the definition of competence is all encompassing it has the advantage of defining competence in a psychological –social manner. Self-esteem can and does influence coping and avoidance and social functioning. A different angle in the theory of self-esteem was put forward by Wegrecki (1939) who proposed that abnormal behaviour could not be defined in terms of behaviour itself nor in terms of conformity to social expectations because cultural standards vary so widely. He argued instead that abnormality must

be evaluated in light of its underlying motivations, because apparently identical and appropriate social behaviours may serve entirely different psychological functions for different individuals. Thus from the universalist position of clinicians we begin to move towards a relativist one. Wegracki (1939) goes on to conclude that the essence of abnormal behaviour is the tendency to choose a type of reaction that represents an attempt to escape from a conflict-producing situation. Thus in his view, the basic foundation of emotional difficulties and low self-esteem is avoidant behaviour. However it is not clear which comes first – emotional difficulties or low self esteem. In the hypothetical model proposed, it is likely that emotional difficulties (which may be related to biological/genetic predisposition) antedate low self-esteem. Bednar et al (1989) propose that interpersonal feedback and especially from the social environment play an important role in development of self-esteem. Rejection is a major catalyst for other psychological processes though not a major cause by itself. Hence it becomes important to look at degrees and mixtures of coping and defence.

Bednar et al (1989) argue that when people respond to rejection by 'impression management' creating conditions which render most of the favourable feedback to be untrustworthy, unbelievable and psychological impotence. Such an awareness combined with poor self evaluative processes may well lead to psychotic experiences. The interaction between the individual (his/her self-esteem) culture and identity is a complex one. A key part of the individual's personality will be their identity which will encompass self-esteem but a careful assessment is required to make sense of the role self-esteem plays in the genesis of psychiatric distress.

The concepts of self vary across cultures. For example, Roland (1980) suggests that child rearing and personality development in a given culture and society is generally congruent with the basic social patterns and cultural values. Stated from a more psycho-analytic standpoint, the intra psychic structures often of an unconscious nature are consonant with the social roles, structures and attitudes and when studied in depth may be found to be an important mirror of ongoing social processes. Rapid social change may well lead to incongruities and conflicts and challenges to new integrations.

Using psychoanalytic perspectives of symbiosis and separation and individuation in early maternal object relations (ie. within the matrix of the early childhood relationship with the mothering person(s)) and central role of narcissism, Roland (1980) argues that in Indian culture individuation and separation will be inhibited and the interpersonal relationships even at early stages of life are very important to individuals. He suggests that early development of self is totally consonant with a social structure and roles in which the individual remains far more involved and embedded within close, well-defined, hierarchical family relationships. Because in this group there is a heightened sensitivity throughout life as to how others view oneself in a wide variety of situations the concept of self includes what Roland calls the expanding self. From the earliest age there appears to be considerable narcissistic identification with the reputation and honour of one's family. This narcissistic self is called familial self by Roland (1987). While comparing the American and Indian concepts of the self, Roland (1987) argues that the Indian conscience has an intrapsychic structure with radar sensitivity to the norms of responsibility and proper behaviour in highly complex kinship relationships enabling the person to act appropriately in a variety of specific situations. In contrast with the American concepts, central to the Indian conscience is the ego-ideal fuelled by the enormous we-self regard of early childhood and fashioned after familial and mythic models. As there exists a great variety of mythic models these are suitable for a diversity of temperaments and aspirations. This ego-ideal is geared towards fulfilling others' expectations in a wide variety of complex relationships, Roland (1987) calls it "socially contextual ego-ideal". The familial self is contrasted with the American personality where the individualised self emerges out of far more autonomy and individuation. This individualised self has an imposed sociocultural necessity to choose and take actions on a number of social opinions ranging from love and social relationships to work choices, ideology and activities as well as the need to self-create one's own identity. Thus intimacy relationships tend to be more fragile. This is not to say that individualised self does not exist among Indians or that familial self is not seen among Americans and these selves emerge from historical and cultural contexts. The third self is called transcendental or spiritual self by Roland (1987) and this deals with religious or spiritual aspects of the self which have been affected by subconscious symbiotic relationships.

The aim of this description is to suggest to the reader that concepts of self vary across cultures and these concepts are often an integral part of ethnic or cultural identity and there are no universal tools of measurements to measure concepts of self across different ethnic groups and cultures. The role of self-esteem within this broad ambit of self is obviously related to how the individuals see themselves and how others see them. This perception may well prove to be an important step forward in understanding the relationship between psycho-analytic concepts of the self and the perceptions of self related to psychotic illness.

The literature on self-esteem and schizophrenia is not extensive. Quite often in studies the description of self-esteem and its measurement is not very clear. The findings on relationship between schizophrenia and self-esteem are mixed. In one of the earliest studies Opler (1957) reported that the Irish patients with schizophrenia were more fearful of females and had low self-esteem when compared with Italian patients with schizophrenia in New York. He associated these behaviours with family life in the areas from which the subjects came. Although concepts of the self had been an integral part of psychoanalytic thinking for a long time its application to treating schizophrenia too was well known in psycho-analytic circles, the narrow definition schizophrenia proved to be a bigger challenge. As previously discussed in the literature review the individual diagnosis of schizophrenia varied dramatically in clinical settings in the USA and in the UK. Hence early descriptions of self-esteem in American literature are not really applicable to the understanding of this sample.

Wing (1978) posited that chronic social disablement in schizophrenia was linked with impairment, social disadvantage and unduly low self-esteem. Although he linked low self-esteem with experiences of institutionalism it is not clear whether he saw low self-esteem is cause or sequelae of acute schizophrenia. Linking low self-esteem with social networks Hirsch (1981) argued that multidimensional social networks not only provided more social support they were also more likely to contribute to better self-esteem. Weinreb (1981) proposed using psychoanalytic method to deal with emotional problems a patient may be left with after the correction of a biochemical

problem such as schizophrenia. She suggested that such an approach is useful in dealing with low self-esteem.

Varkey and Sathyavathi (1984) on comparing 18 schizophrenics with 18 manics and a group of normal controls on a series of measures of locus of control, self-esteem and deviance reported that schizophrenics had a significantly lower self-esteem. Warner (1983) had suggested that recovery from schizophrenia in the third world was related to a better integration in the working environment where the patients were able to retain their self-esteem and felt valued in the community. Lorimor et al (1985) were able to confirm low self-esteem in schizophrenia. They found that self-derogation at the time of discharge was related to subsequent adjustment. Thus it appears that self-derogation and low self-esteem play some part in subsequent adjustment and development of chronic conditions. Interestingly, Shotten (1985) reported from Israel that traits of self-esteem were poorly developed in families who were at high risk of developing schizophrenia. She studied 100 children at high risk of developing schizophrenia and also controls but with a focus on parents' observations of the personality and behaviour of their off-spring. The traits of self-esteem were studied as part of the family interviews. By parental report, high risk children were more likely than controls to have developed psychopathological symptoms related to mood, social withdrawal, antisocial behaviour and also had poorer relationships with both parents and peers. Although original in conception, this study relies on parental reports who are more likely to be sensitive to mood changes etc. if they perceive their children to be at risk for a serious mental illness.

Garfield et al (1987) and van-Dongen (1996, 1998) on the other hand were unable to confirm low self-esteem in schizophrenia although they found that some specific domains of self-esteem may be affected.

Contrary to the reported findings of Mackota and Lamb (1989) and Potocky (1993), Chambon et al (1996) and Chambon and Marie-Cardine (1998) were unable to demonstrate an improvement in self-esteem or self-efficacy in patients with schizophrenia even after intensive interventions thereby suggesting that parts of patient's self-esteem may be so damaged that these can't be modified.

Poor self-esteem in schizophrenia has been linked with stigma associated with mental illness (Wahl and Harman 1989, Mechanic et al 1994), specific symptoms of illness such as hallucinations (Gallaher et al 1995); life satisfaction (Kemmler et al 1997), gender (males are reported to have lower self-esteem, Farmer and Pandurangi 1997) and lack of religiosity (Payne et al 1991) thereby suggesting a complex multidimensional interaction of factors. These contribute to poor self-esteem either directly or through other pathways such as perceived roles and support from others.

Virtually all this literature deals with patients who have developed schizophrenia (except Shotten, 1985). On this section the reader's attention is drawn to the possibility that pre-existing low self-esteem may work as an aetiological contributor to the development of schizophrenic illness. The concepts of the self are quite different across these three ethnic groups hence it is likely that different factors may be at play through different pathways. The proposed model highlights some of the very findings from the present study which may well contribute towards the social aetiology of schizophrenia.

Psychosis is seen as a life event itself and its onset can limit activity in interpersonal and achievements domains thereby leading to loss of valued roles or goals. With 47 broad class S cases of schizophrenia, Rooke and Birchwood (1998) demonstrated that 17% of the sample were depressed at this time compared with 28% from the original sample 2.5 years previously. They did not find devaluation of self at all at follow up suggesting that loss of self-esteem may well predate the onset of psychosis. Using psychosis as a continuing chronic difficulty as a vulnerability factor, one can begin to understand the role of precipitating factors on vulnerability.

The available data do not confirm whether low self-esteem is a vulnerability factor or precipitating factor but the instinctive feeling would be that this type of vulnerability combined with different and changing concepts of self which may be affected by moving cultures mean that the role of migration can not be completely ruled out. Understanding beliefs of individual patients along with their experiences of psychotic experiences may well influence the models of illness. Sensky and Baumann (1994)

had reported that a quarter of their respondents blamed living away from home as a possible cause of psychological problems. This finding highlights the (inter) dependency of relationships in Asian households thereby indicating that concepts of self would vary.

The relationship of self-esteem to the onset of acute psychosis must be seen as contributory rather than as a single cause. Low self-esteem and poor adult attachments may well work in an aggregate manner. It will be useful to identify low self-esteem in children of families who may be vulnerable to schizophrenia and then follow them up for a long period to assess the relationship of developing psychosis with poor self-esteem. Self-esteem itself may be a result of odd personality traits, poor social interaction, peer interactions which can be all related to social withdrawal thereby confirming poor self-esteem, thus setting up a vicious circle. From the literature available, all that can be said is that self-esteem needs to be studied in first onset cases of schizophrenia.

The contribution of organic, physical as well as social factors to the aetiology of schizophrenia varies. Social factors which are external to the individual such as unemployment, poor housing and personal factors like personality traits all have a contributory effect but whether these are differential or cumulative in aetiology remains to be confirmed. Self-esteem is being proposed here as an additional contributory factor but its impact needs to be studied in future studies.

The proposed model is shown in Figure 6.1 and is a modification of the stress diathesis model. It posits a multi-factorial aetiology.

Biological or genetic vulnerability in conjunction with drug abuse may be linked with pre-existing psychological and social factors. Of these, personality of the individual and concepts of self and cultural identity remain important factors. The significant contribution of genetic factors to the aetiology of schizophrenia cannot be underestimated. Heritability estimates range from 60-93% and the contribution of all non-genetic factors including cultural transmission is at best around 24% (McGue *et al.* 1983). However, the nature of the genetic basis of the disorder remains elusive.

Family history and neuro-developmental anomalies, either prenatal or early childhood have been shown to be significant contributors (McGrath and Murray, 1995). However, these differences have not been shown to be persistent across minority ethnic groups. Minor physical anomalies have been noted to be identifying features of obstetric and birth complications thereby making the aetiology multi-factorial.

A pattern of premorbid schizoid (Kretschmer, 1936) or schizotypal (Meehl, 1962) traits has been said to be associated with a predisposition to schizophrenia. These schizoid personality traits have been shown to be present in one-quarter of patients and another one-sixth have paranoid traits (Cutting, 1985). The DOSMD study (Jablensky *et al.* 1992) found one trait in premorbid functioning of patients which can be seen as corresponding to the schizoid personality. Other authors have proposed that a score on schizoid/schizotypal traits and a score on poor premorbid social adjustment in adolescence distinguished significantly between schizophrenia and affective psychoses especially in males and predicted an early age at first admission. In addition, social under-achievement, irrespective of parental social class, characterised the premorbid functioning of DSM-III cases of schizophrenia (Foerster *et al.* 1991).

In addition, as already shown, social factors such as isolation and being single act as contributory factors.

These, when linked with poor role modelling in childhood with prolonged separation from one or both parents and subsequently being unemployed and living alone with no close confidants may all act as vulnerability factors, these may predispose an individual to react to life events with a psychotic breakdown, or to chronic difficulties in the social environment especially racial harassment and racial life events.

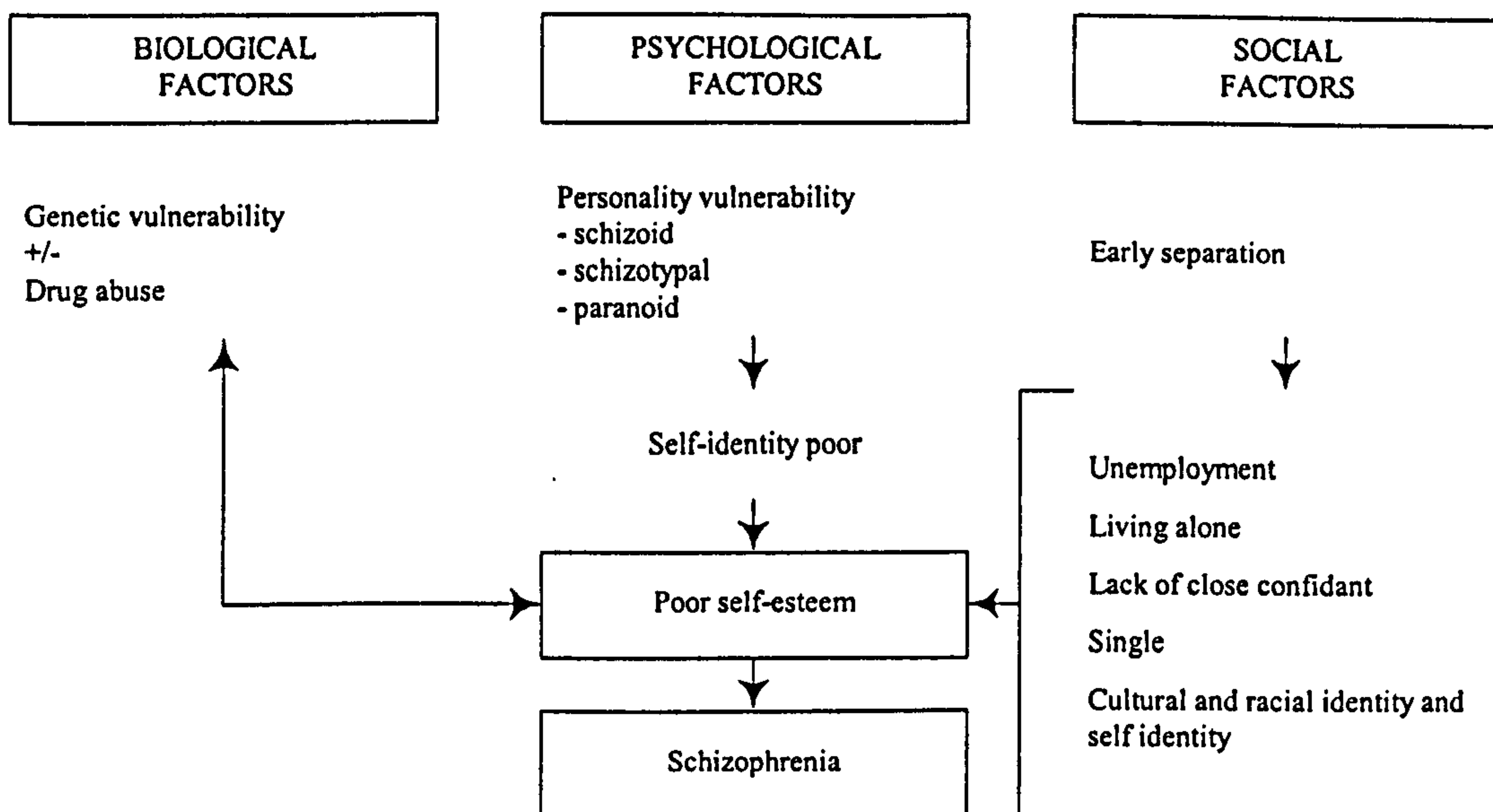


Figure 6.1 Proposed model of aetiology

Early separation can affect personality development as well as lead to living alone, not having close confidant and being single but it may not affect cultural identity and gaining employment. However, not having a suitable employment may well lead to low self-esteem and social isolation. Social isolation may well be attributable to low self-esteem. In African-Caribbeans pregnancy and birth complications are said to be less common and may not play an important role in genesis of psychosis (Hutchinson et al 1997).

It must be emphasised that the biological factors on the one hand and psychosocial factors on the other can only work in tandem. If the individual has a biological vulnerability then psychosocial factors may well act as precipitating factors. Psychological, social and biological factors may all act independently as vulnerability factors and future research must address the relative importance of each of these factors in contributing to the aetiology of schizophrenia.

The findings of the present study suggest that there are cultural and ethnic differences in rates of schizophrenia as there are differences in social factors and outcome. For some of these factors ethnicity is not a significant variable whereas for others it remains so. Thus a study of combination of biological and non-biological factors in the three groups along with using case control method may answer some of the questions posed thus far.

This model can be tested in future studies. The role of individuals' self-esteem has not been discussed in the aetiology of psychosis but it appears likely to play an important role. The stress vulnerability model is applicable to depression and to schizophrenia. However, there appears to be a common pathway bearing in mind the large proportion of patients with schizophrenia who also have symptoms of depression (Leff, 1988). It is noteworthy that in the present sample nearly one-third of patients exhibited simple depression. This vulnerability combined with biological vulnerability (which was not tested in the present study but has been shown to be genetic or possibly obstetric) may tilt the balance in favour of the development of schizophrenia rather than depression. As borderline personalities show a tendency to dip into psychosis under stress, it is likely that in the proposed model such vulnerability can play a key role. In testing this model, self-esteem, life events and chronic difficulties as well as social networks in relation to inception and outcome of schizophrenia along with adult and childhood attachments need to be studied.

The role of attachments in forming an individual's identity and social functioning is an important one. If individuals are separated from key family members in childhood, forming attachments may prove difficult. Melhuish (1993) argues that assessment of attachment in infancy and childhood has to be seen in relation with attachment to peers as well. Thus one can argue that lack of appropriate attachment in childhood makes the individuals more likely to become socially isolated or have poor attachments in adulthood. Furthermore, such traits may make attainment of employment even more difficult in situations when general unemployment levels are high. Although seven separation situations have been described (Schaffer and Emerson 1964) it is only relatively recently that attachment in later life is being studied. In addition to social isolation, factors like uprooting, acculturative stress and discrepancy between achievement and expectation may contribute to poor self-esteem and poor social relationships.

Main (1994) suggests that infant-mother dyads can provide an insight into later life functioning as well as how the individual described their own early relationships to parents. Urban *et al* (1991) have argued that children who are secure with mother at

one year of age are more likely than other children to function well in the peer setting 5, 9 and even 14 years later. Fonagy *et al* (1991) propose that attachment security in infancy is based on parental sensitivity to and understanding of the infant's mental world and the parent's capacity to understand the infant would be interfered with by incoherent mental representations of the mental world of self and other as a consequence of the parents' attachment history. Thus there is a case that individuals who have been separated from parents (albeit in the care of other attachment figures) are more likely to feel bereft and have poorer attachment relationships. This in itself will affect self-esteem and other social behaviours and also social situations thereby making the three key factors (living alone, unemployment and poor social contact) more likely. Low self-esteem as a result of poor attachments is likely to affect social functioning and may well lead to individuals performing poorly at interviews as well as in actual employment situations. Furthermore poor modelling and functioning is also likely to contribute to poor peer relationships and support in stressful situations at work. Linked with this is also the internal cognitive functioning of the individual - there being an intrinsic link between the evolution of awareness of mental process in the self and in the other. The dynamic implications of the growth of the other in relation to the self has yet to be spelt out although exceptions exist (Fonagy 1989). Fonagy *et al* (1996) have proposed that cases of depression and borderline personality disorders were linked with trauma as well as high levels of neglect and lack of resolution of conflict. If borderline experiences are seen as related to psychosis it can be argued that similar features will emerge in the cases of psychosis.

6.9 FUTURE RESEARCH

The numbers in the present study, though the largest in a study reported thus far are still relatively small for drawing conclusions, and within each group there remains a marked degree of heterogeneity. Future research must be undertaken in multi-centre collaborative settings where large numbers of individuals in each ethnic group can be included. As the design of the present study did not aim to look at the causal association between aetiological factors and schizophrenia, future designs should include case control methods.

The study of a high risk group is likely to elucidate aetiological factors. The high rates and poor outcome of schizophrenia in the British African-Caribbean population

cannot be wholly explained in genetic terms because of the low rates in the Caribbean countries. One must therefore postulate that the African-Caribbean population in the UK is subject to risk increasing factors in the social and/or physical environment which are less common in the Caribbean - either these ethnic groups are particularly subject to these risk factors or else there is a specific genetic vulnerability.

The case control study follows a paradigm that proceeds from effect to cause. Using such an approach, individuals with a particular condition or disease (schizophrenia in this instance) (the cases) are selected for comparison with a series of individuals in whom the condition or disease is absent (controls). The two groups are then compared with respect to existing or past attributes or exposures thought to be relevant to the development of the condition or disease (schizophrenia in this instance) under study. The case control method selects subjects on the basis of the presence or absence of schizophrenia. This allows not only an estimation of effect of exposure on the risk of disease in terms of relative risk parameter but also the causal effect. Future work must use population based case controls. All cases of schizophrenia within a defined geographic area during a specified period of time as followed in the present study are then compared with a probability sample of individuals free from schizophrenia in the same geographical area. Schlesselman and Stolley (1982) recommend that such an approach is useful for either an exploratory study of disease aetiology or investigating a rare disease. The characteristics of exploratory study must include an attempt to gather data concerning possible differences in a variety of factors among the cases and controls so that aetiological clues worthy of further study will emerge.

Case control method has the advantages of being well-suited to the study of rare diseases and those with long latency and allows study of multiple potential courses of a disease.

6.9.1 EPIDEMIOLOGICAL RESEARCH

The following areas form the possible avenues of future research:

- a. **Familial Risk:** Using siblings and other family members as controls for the study of aetiological factors will allow researchers to compare and contrast

- roles of social factors like education, employment, living alone and access to a close confidant in the aetiology of schizophrenia
- b. Secondly, there is increasing evidence that siblings of African-Caribbeans are at greater risk of schizophrenia making social causation more likely (Sugarman and Crauford, 1994; Hutchinson *et al*, 1996). The siblings need to be studied on a similar set of parameters, for example, rates of unemployment, separation from one or both parents.
 - c. No similar studies have been carried out on the Asian group - sibling studies to look for risk of schizophrenia and affective disorders need to be carried out as a matter of urgency. This comparison between the two ethnic groups will allow researchers to compare social factors and ascertain the importance of relative risk factors in the aetiology of schizophrenia and affective disorders
 - d. Although schizophrenia has been seen as an illness of neuro-developmental origin few studies have looked at minor physical anomalies in the African-Caribbean groups and Asian populations. The prevalence of such anomalies in the general population is needed along with the patient populations to assess the biological vulnerability. It is of course possible that minor physical anomalies and childhood dysfunction could result from developmental impairment of either genetic or environmental origin. Within such a study, place of birth and age of migration of parents must be included.
 - e. Other biological factors: Drug and substance abuse as well as brain structure need to be studied within the patient and the base populations Cannabis consumption may well precipitate psychoses in those carrying some susceptibility. Future studies must include a careful detailed history as well as blood and urine assessments.
 - f. Social factors: Other key social factors that need to be studied in the aetiological assessment of psychoses are life events and chronic difficulties especially racial difficulties. In addition, in the minority ethnic groups an accurate assessment of achievement and expectations in various fields of social functioning may highlight some of the factors leading to poor self-esteem. The social drift versus social breeder hypotheses have not yet been fully resolved especially in the two minority ethnic groups. Disaffection related to unemployment and being discriminated against on racial or ethnic

grounds are likely to play an important contributory role in the genesis of psychoses. Moderating factors like social support, employment, education and social class rather than ethnicity alone need to be taken into account.

- g. **Poor outcome:** The poor outcome in African-Caribbeans may be a consequence of poor services available or a lack of cultural sensitivity in the provision of services. Both these factors need to be studied in prospective studies. It is possible that continuing chronic difficulties like poor housing, unemployment, social isolation may well continue to affect the outcome. The difficulties in engaging this group in after care could be due to a number of factors - poor or inappropriate services both at primary care and secondary care levels. The attitudes and health care beliefs of patients and their carers need to be studied. In addition, poor housing, social isolation and unemployment in themselves may add to poor acceptance of after care.
- h. **Expressed Emotion:** The relatively better prognosis in Asians may be due to availability of family support. As low Expressed Emotion has been shown to play a key role in India, the finding needs to be replicated in the UK Asian sample. As a result of low Expressed Emotion their self-esteem may well be higher than that seen in the African-Caribbeans. Furthermore, the role of marriage as a possible protective factor may offer an insight into developing management and preventive strategies in context of social support and social care.
- i. It is also possible that the differential outcome may be related to differences in the nature of the illnesses experienced in the three ethnic groups. For example, it is possible that older Asian females may simply be persuaded to come in voluntarily to see mental health professionals whereas the African-Caribbean males may well have schizomaniac symptoms making forensic or legal interventions more likely. These can only be studied in multi-centre collaborative projects.

6.9.2 ETHNOGRAPHIC RESEARCH

Further research in this field must look at ethnographic data collection. Firstly, every effort needs to be made to understand the meanings of symptoms as well as help-seeking models. The individuals and their carers determine the pathways into care.

Full descriptive and ethnographic accounts will allow the researchers and clinicians to determine the role of social factors in help-seeking itself.

Ethnographic data needs to be collected on individuals' experiences of the illness and the services as well as on their ethnic and cultural identity.

Thirdly, such an approach will provide insight into the functioning of the family as well as the social support systems as both of these are likely to prove crucial in determining the outcome.

The task of further research is to specify social, biological as well as physiological factors which may interact with each other to produce illness in individuals more vulnerable to schizophrenia.

7. CONCLUSION

The present research was able to confirm that the inception rates of schizophrenia in the African-Caribbeans in two catchment areas in London are higher than those among the white and Asian samples. The rates in the latter two groups were broadly similar. Although the overall numbers are small and the data were collected from two different catchment areas this is the first study to have a substantial number of Asians as a comparative group.

Some interesting similarities and interesting differences emerged in the comparison across the three groups. By and large, there were more similarities especially in the presentation of symptoms, pathways into care and early manifestations of abnormal symptoms. The Asian group was more likely to be older and female and marginally more likely to own their own homes and to live with family. The whites and Asians were more likely to be employed when compared with African-Caribbeans although educational attainments in the latter group were more likely to include tertiary education.

Over a one-year follow-up the outcome is shown to be poor in the African-Caribbean group. Various factors like unemployment, living alone, poor quality housing can be linked with these although a clear causal association can not be made.

The high inception rates in the African-Caribbean group in the UK can not be explained in wholly genetic terms as the rates are low in the Caribbean. These can not be explained as a result of migration in this group as a majority were born in the UK, although the Asian group was more likely to have been born outside the UK. The likely role of a schizotypal personality is less in the Asian sample, since many were older females who migrated because of their husbands and family. Therefore, it must be postulated that these populations are either subject to risk-increasing factors in the social and/or physical environment which may be less common in the "sending" countries or more prone in this country. Thus, social factors like poor housing, social isolation and unemployment become possible contributory factors in the aetiology of schizophrenia.

The present research confirms the findings previously reported that high inception rates of schizophrenia in the UK African-Caribbeans are a genuine finding. The question of diagnostic reliability can be laid to rest as misdiagnosis is a diminishing option. Using standardised criteria and ethnic matching, any cultural distance between the interviewer and the patient has been reduced.

This is the first study to include data on two minority ethnic groups collected over a two-year period to generate reasonable sized samples. Furthermore, the denominator is more accurate than in any study conducted prior to the 1991 census. Future research must include controls from the population to identify specific social factors affecting the aetiology of schizophrenia. It is clear that ethnic minority groups as well as the larger white group are heterogeneous. Cultural and racial factors need to be studied in all the three groups in order to understand the aetiology as well as the outcome of schizophrenia.

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APPENDIX 1

ETHICAL COMMITTEES

APPROVALS



UNIVERSITY OF LONDON
BRITISH POSTGRADUATE MEDICAL FEDERATION
THE BETHLEM ROYAL HOSPITAL
AND
THE MAUDSLEY HOSPITAL

INSTITUTE OF PSYCHIATRY

DE CRESPIGNY PARK
DENMARK HILL
LONDON, SE5 8AF
TEL: 01-703 5411
FAX: 01-703 5796

ETHICAL COMMITTEE

Bethlem Royal Hospital and the Maudsley Hospital
and the Institute of Psychiatry

19 March 1990

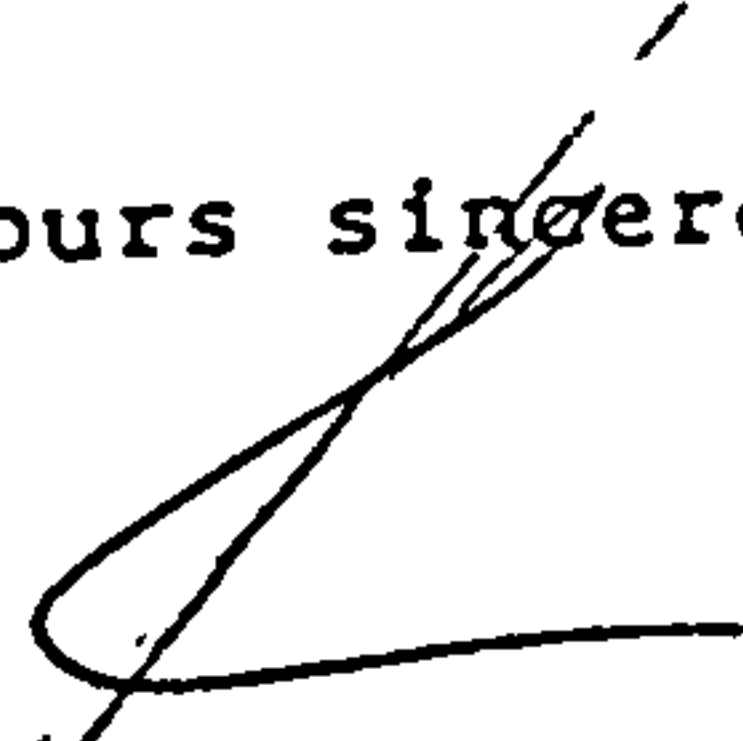
Professor J Leff
MRC Social Psychiatry Unit

Dear Professor Leff

RE: SOCIAL FACTORS IN THE LIVES OF WHITE AND BLACK PSYCHOTIC PATIENTS
(12/90)

The Ethical Committee (Research) has approved the procedure you have informed them you propose to use in this investigation.

Yours sincerely


J Connolly MB MPhil FRCP FRC Psych
Chairman
Ethical Committee (Research)

Camberwell.
Health Authority - London

ETHICS COMMITTEE -
Chairman - Dr Kevin J Zilkha

King's College Hospital
Denmark Hill, London
SE5 9RS
Telephone 071 326 3359

In the event of any query,
kindly telephone
Administrator to Ethics
Committee: Mrs L Brooke

Or write to:
Mrs Lucille Brooke
District Administration
Room 2, 2nd Floor
Central Administration
Block, King's College
Hospital

Kindly Quote Protocol no. *E.153740*
on any future communications.

Our ref: LB/JN

29 November 1990

Professor J Leff
MRC Social and Community Psychiatry Unit
Institute of Psychiatry

Dear Professor Leff

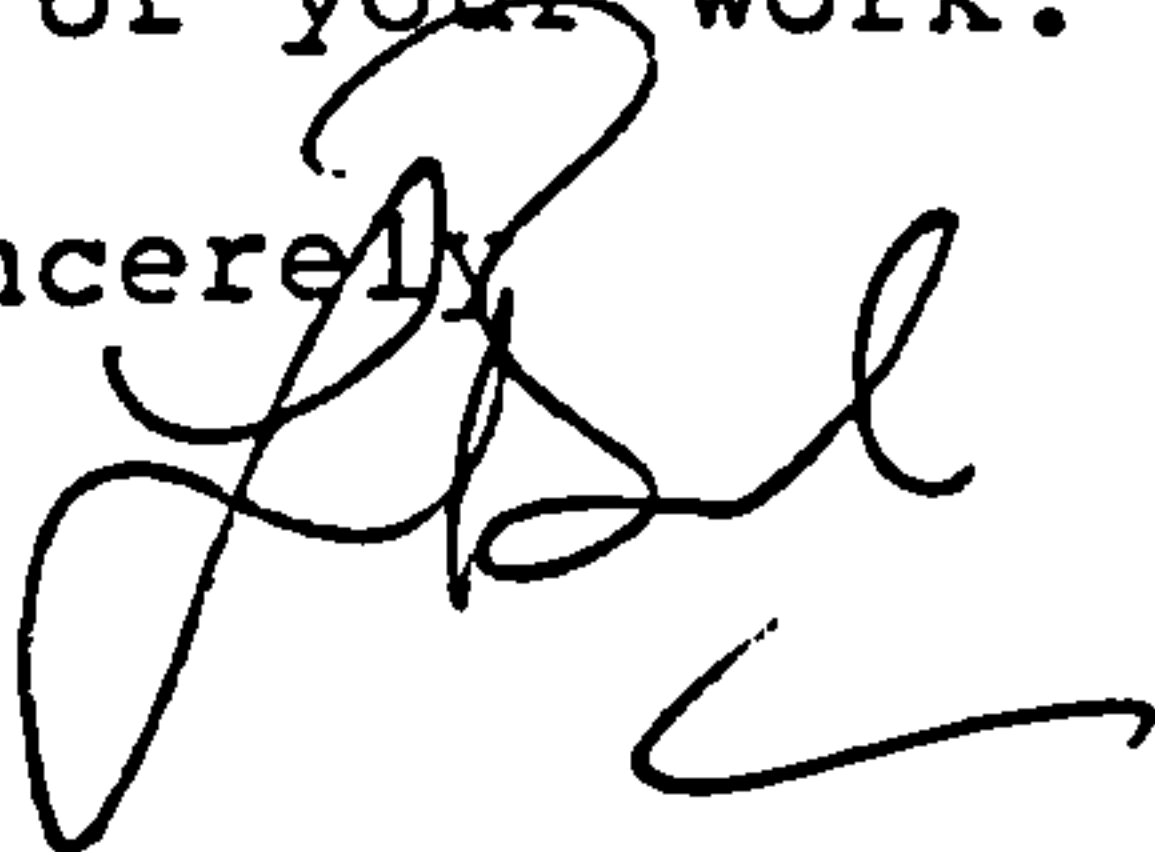
Re: Social factors in the lives of white and black psychotic
patients

Thank you very much for your letter of 5 November 1990 in
which you respond to points raised by this Ethics Committee
and include additional information.

I am pleased to inform you that at its meeting today the
Ethics Committee gave its approval to the above project, on
ethical grounds.

Dr Zilkha and the Committee would be pleased to hear of the
progress of your work.

Yours sincerely,



Lucille Brooke (Mrs)
Ethics Committee

c.c. Mrs Sue Burton
Chief Pharmacist
KCH

Address : Dr. Dinesh Bhugra
MCR Social & Community Psychiatry Unit
Institute of Psychiatry
De Crespigny Park
London, SE5 8AF



Chairman: Mrs D C Eccles

Ealing Hospital

ST. BERNARD'S WING

Ealing Hospital

Uxbridge Road, Southall,

Middlesex UB1 3EU.

Tel: 081-574 2444 Fax: 081-574 3619

Telecom Gold 75:NHS1690

Your ref :

Our ref :

EMS/DR

Date :

8th August 1990

Dear Dr. Bhugra,

PROTOCOL: Social Factors in the
lives of psychotic patients:

At the meeting of the Committee for the Ethical Supervision of Clinical Investigations held on 27th July 1990, the committee gave approval to the above protocol.

To enable the Committee to receive feedback of research approved, you are requested to provide six monthly reviews. Where the six monthly review is not provided, the Committee reserve the right to suspend approval of the Protocol.

The results of the research should be sent to the Chairman of the committee, if necessary in draft form, pending a copy of the completed final report/publication, which will be made available in the Medical Library.

Further research projects submitted to the Ethical Committee by researchers who fail to comply with these conditions, will not be approved.

If there are any changes to the Protocol, these must be notified to the committee for approval.

Yours sincerely

Edna Sydes

Edna K. Sydes
Operational Services/
Placements Manager

Camberwell.

Health Authority - London

ETHICS COMMITTEE -

Chairman - Dr Kevin J Zilkha

King's College Hospital

Denmark Hill, London

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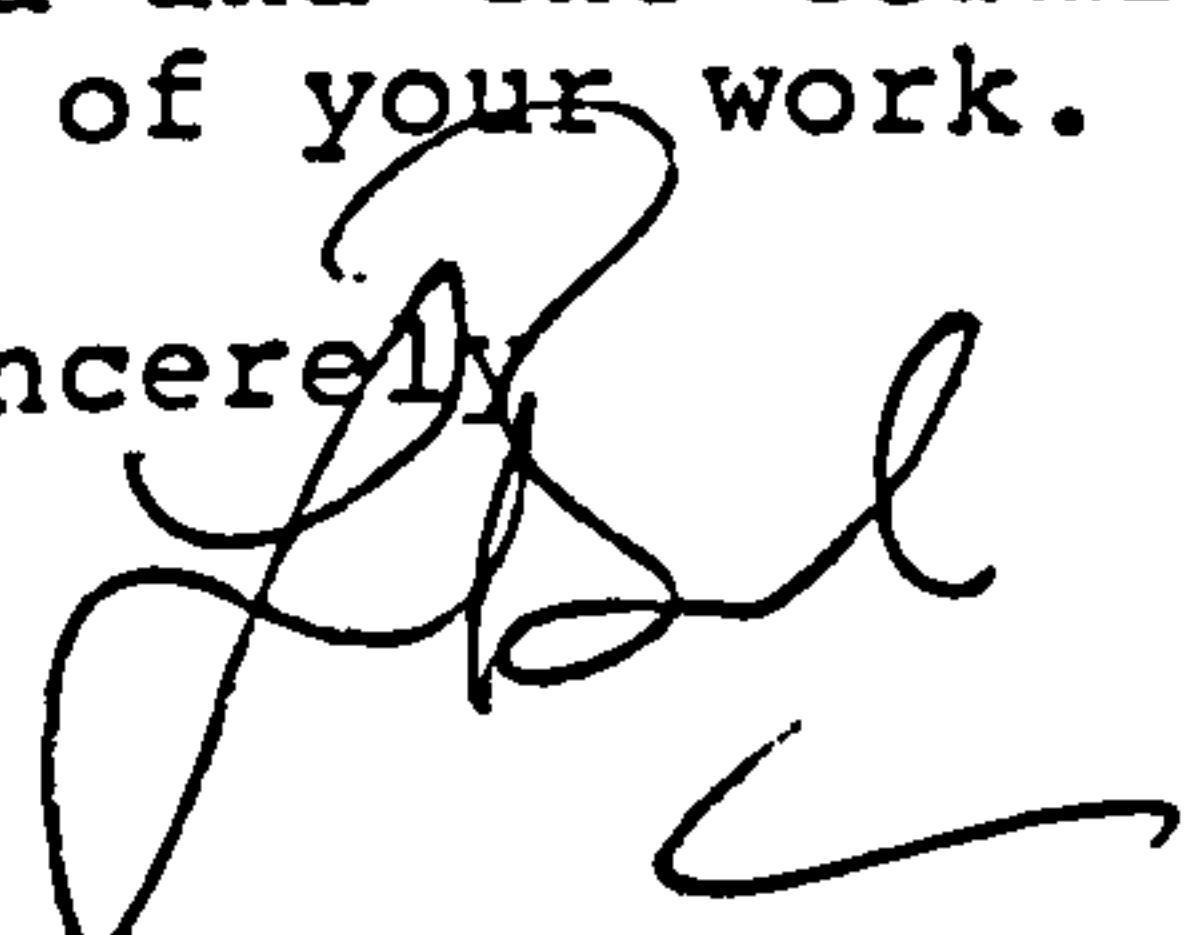
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Yours sincerely,



Lucille Brooke (Mrs)
Ethics Committee

c.c. Mrs Sue Burton
Chief Pharmacist
KCH

APPENDIX 2

INCLUSION / EXCLUSION CRITERIA

Appendix 1:

Entry criteria for unselected series of 1st onset psychoses

A

1) Is this patient's age below 15 or above 65	NO	YES
2) Does this patient at present live <u>outside</u> the catchment area defined for this study?	NO	YES

B

Is there evidence that this patient has any of the following problems: (see guidelines)		
1) Clinically manifest organic cerebral disorder (eg infectious, parasitic, toxic, cerebrovascular, epilepsy, brain injury, etc)	NO	YES
2) Severe or moderate mental retardation (ie IQ less than 50 or clinically manifest as such)	NO	YES
3) Organic CNS damage due to alcohol or drug dependence and manifest in encephalopathy usually with polyneuritis	NO	YES

C

During the past one year has the patient presented any of the following?		
1) Hallucinations or pseudohallucinations in any modality	NO	YES
2) Delusions	NO	YES
3) Marked thought and speech disorder (eg incoherence, irrelevance, thought blocking, neologisms, incomprehensibility of speech) other than simple retardation or acceleration	NO	YES
4) Marked psychomotor disorder (eg negativism, mutism or stupor, catatonic excitement, constrained attitudes or unnatural postures maintained for long periods) other than simple retardation or acceleration	NO	YES
5) Emergence or marked exacerbation of bizarre and grossly inappropriate behaviour (eg talking or giggling to self, acts incomprehensible to others, loss of social constraints, etc)	NO	YES

D

During the past one year has the patient presented a definite <u>change</u> of personality and behaviour manifested in any of the following?		
1) Marked reduction or loss of interests, initiative and drive, leading to serious deterioration of the performance of usual activities and tasks	NO	YES
2) Emergence or marked exacerbation of social withdrawal (active avoidance of communication with other people)	NO	YES
3) Severe excitement, purposeless destructiveness or aggression	NO	YES
4) Episodic or persistent states of overwhelming fear or severe anxiety	NO	YES
5) Gross and persistent self-neglect	NO	YES

E

Has the patient been admitted to any hospital, or otherwise diagnosed and/or treated for a psychotic disorder, similar to, or continuous with the present illness, at any time before the last three months? (Do not consider contacts for minor problems long ago, like attendance of a child guidance clinic for conduct or emotional disorder etc)	NO	YES
---	----	-----

Conditions for inclusion in the study: All replies to questions in Sections A, B, and E must be "no" and there should be at least one "yes" in section C or two "yes" in Section D

APPENDIX 3

PSE HINDI / PUNJABI

Text cut off in original

पी० एस० ई० (हिन्दी) पी. एम. सी.

PRESENT STATE EXAMINATION

(Including Hindi adaptation of ninth edition, September 1978)

PATIENTS' NAME : _____

SEX : _____

ADDRESS : _____

NAME OF FACILITY : _____

IDENTIFICATION NO. OF PATIENT IN THE FACILITY : _____

DATE OF REGISTRATION : _____

PATIENT'S WHO NO :

--	--	--

WHO FIELD RESEARCH CENTRE :

--	--

WHO PROJECT NO :

--	--	--	--	--	--	--	--

PSYCHIATRIST WHO INTERVIEWED THE PATIENT :

--	--	--

PSYCHIATRIST WHO MADE THIS ASSESSMENT :

--	--	--

THIS SCHEDULE FILLED IN AS A PART OF A CAPABILITY INTERVIEW ?

No. 1 - Yes, the person who filled in this schedule also interviewed the patient ;
 No. 2 - Yes, the person who filled in this schedule was present during the interview but did not interview the patient himself.)

PLACE OF INTERVIEW : _____

DATE WHEN THIS FORM WAS FILLED IN :

--	--

 /

--	--

 /

--	--

DAY MONTH YEAR

IF AUDIO-TAPE RECORDING IS MADE, SPECIFY TAPE NO. : _____

TIME TAKEN TO COMPLETE THE INTERVIEW (IN MINUTES) :

--	--	--

NO. OF SESSIONS REQUIRED TO COMPLETE THIS ONE PSE INTERVIEW, SPECIFY WITH DATES :

SESSION NO.	DATE	SECTIONS RATED
1		
2		
3		

HAS THIS PATIENT BEEN INTERVIEWED WITH PSE EARLIER, SPECIFY PREVIOUS DATES : _____

USE OF CASE RECORDS (SPECIFY) : _____

INSTRUCTIONS

The instruction manual contains a detailed description of the origins, development and underlying principles of the PSE and a glossary of definitions of symptoms. The examiner must be thoroughly familiar with the manual and glossary and should have had some prior training in the use of the PSE.

Four kinds of question are written into the schedule:

(a) Obligatory (starred) questions

These must be asked if the interview is conducted at all. Only 54 questions are involved. Thus subjects with no symptoms, who ask clarifying questions of their own and who answer clearly and decisively, can be screened very quickly indeed. Whenever there is any doubt, however, and certainly whenever a symptom needs clarification, the second kind of question should be asked.

(b) Bracketed questions above cut-off points

These help to define the nature and extent of a symptom and should always be asked if there is any doubt about replies to obligatory questions.

(c) Unbracketed questions below cut-off points

Once the examiner has proceeded below a cut-off point, he must ask *all* the unbracketed questions in that part of the section.

(d) Bracketed questions below cut-off points

These serve the same function as similar questions above cut-off points, i.e. they help to define the nature and extent of a symptom. They are used only if there is some other evidence that the symptom is present.

In addition, the examiner himself will usually wish to ask other questions which are not written into the schedule, either general probes or more specific questions, depending on the nature of the patient's replies.

Each symptom is defined to some extent within schedule itself but the examiner must be completely familiar with the fuller definitions in the glossary. A full discussion of scoring is also included in the glossary, particularly as to how to differentiate (0) from (1), and (1) from (2).

(0) = Examiner satisfied that symptom not present to clinically significant degree during past month.

(8) = Examiner not sure whether symptom present during past month, even though the appropriate questions have been asked, and answered without incoherence or evasion. The symptom cannot be excluded.

(9) = No rating can be made because question not asked or subject does not answer or answer is incomprehensible.

It should be emphasised that using the PSE schedule will not in itself guarantee useful results. The quality of the output of any system depends on the quality of the input.

The interviewer should introduce himself briefly, describe the purpose of the interview and explain about any recording equipment. The purpose of the introductory section is to obtain an overall picture of the symptomatology, in the subject's own words.

यदि मैंने पिछले एक महीने में आपको कौन कौन सी या किस तरह की तकलीफें रही हैं ? ज्यादा तकलीफें किन बातों से रही हैं ?

** To begin with, I should like to get an idea of the sort of problems that have been troubling you during the past month. What have been the main difficulties ?

सबसे पहले मुझे यह बतायें कि पिछले एक महीने में आपको कौन कौन सी या किस तरह की तकलीफें रही हैं ? ज्यादा तकलीफें किन बातों से रही हैं ?

Record the main symptoms spontaneously mentioned.

Means of exploration, if subject gives inadequate information :

<i>If subject's statement too brief</i>	Can you tell me more about that ?
<i>If subject has no more to add</i>	What else has been troubling you ?
<i>If statements are difficult to understand</i>	Can you explain what you mean by...?
<i>If subject is vague</i>	Could you give an example of...?
<i>If no other response forthcoming</i>	Why did you come to the (hospital) ?

RATE PATIENT'S ACCOUNT OF SYMPTOMS.

0=Subjects responds adequately.

1=Account somewhat inadequate but interview can proceed.

2=Account seriously inadequate but interview proceeds in an attempt to rate some subjective responses, as well as behaviour, affect and speech. (see 140)

3=Impossible to continue with interview. Only behaviour, affect and speech sections rated.

REASONS FOR INADEQUACY (TICK AS MANY AS APPROPRIATE).

Denial or guardedness	_____	Inattention	_____
Incoherence	_____	Refusal	_____
Irrelevance	_____	Patient mute, stuporous, etc.	_____
Replies too brief	_____	Other, specify	_____
Poverty of content of speech	_____		

IF (1) OR (2) CARRY ON WITH SECTION 2, UNLESS SUBJECT MENTIONS OR HINTS AT DELUSIONS OR HALLUCINATIONS → SECTIONS 18.

Cut off

Current treatment, if subject not seen in hospital or clinic

Rate the following if sufficient information has already emerged.

If not, use the suggested question.

MAY I ASK IF YOU ARE SEEING ANY DOCTOR FOR YOUR NERVES ?

मन की परेशानी या मन की घबराहट के लिये क्या आप किसी डाक्टर को दिखा रहे हैं ?

Or specify if psychosomatic complaints.

मन की परेशानी का घबराहट लगी बिना डाक्टर ही दिखा रहे हैं ?

WHAT KIND OF DOCTOR IS HE ?

YOUR OWN GP ? A PRIVATE DOCTOR ? PSYCHIATRIST ?

कौन से डाक्टर साहब हैं ? बिना डाक्टर ?

0= No doctor

1= GP

2= Private doctor other than GP

3= Psychiatrist

4= Hospital out-patient (other than psychiatric)

5= Other paramedical specialist, or osteopath

6= Other specify

ARE YOU ATTENDING FOR TREATMENT ANY PERSON WHO IS NOT MEDICALLY QUALIFIED, E. G. LAY THERAPIST, HERBALIST, ACUPUNCTURE FAITH HEALER, CHRISTIAN SCIENCE, CHURCH WHICH FORBIDS MEDICAL ADVICE ?

अपने इलाज के लिये क्या आपने किसी भाड़फूंक वाले, हकीम, वैद्य, या भूतप्रेत उतारने वाले को दिखाया ?

बिना किसी भी रिश्ते में, जरीम, टैर नां कुछ थूड डिटाठ्ट लगी रिश्ते में
WHAT WERE YOU COMPLAINING OF AT THE TIME ? बिना रिश्ते में ?

उस समय आपको क्या तकलीफ थी ?

डिम टरड डुगरी री उरलीक भी ?

Specify type of treatment.

Complaint

2. HEALTH, WORRYING, TENSION

** IS YOUR PHYSICAL HEALTH GOOD ?

क्या आपकी शारीरिक (जिस्मानी) सेहत ठीक रहती है ? री डुगरी सेउठ ठीर ठीरिरी ?
(Does your body function normally ?)

** DO YOU FEEL YOU ARE PHYSICALLY ILL IN ANY WAY ?

क्या लगता है कि आपको कोई शारीरिक (जिस्मानी) बीमारी है ? लुगटा उं रि रीरि निममासी
(What is that like ? How serious is it ?) बिमारी ?

RATE SUBJECT'S OWN SUBJECTIVE EVALUATION, OF PRESENT PHYSICAL HEALTH (irrespective of whether physical disease is present).

0= Feels physically very fit.

1= Feels particular physical complaint but does not say positively feels fit.

2= Feels unwell but not seriously incapacitated.

3= Feels seriously incapacitated by physical illness.

(1)

•• WHAT DOES YOUR DOCTOR SAY IS WRONG ?

5

डाक्टरों ने क्या बताया कि क्या बीमारी है, क्या नुकस है ? शरटों के से धमिमा से रिगड़ी
(Have you had a physical illness recently ; colds, influenza, etc.?) बिमारी का सुरस से ?

RATE PRESENCE OF PHYSICAL ILLNESS OR HANDICAP

 (2)

taking results of recent investigations and physical state examinations into account.

- 0= No physical illness or handicap present.
- 1= Mild but significant physical illness or handicap (e.g. influenza or limp).
- 2= More serious physical illness or handicap present but not incapacitating or threatening to life (e.g. deafness or duodenal ulcer).
- 3= Physical illness or handicap present which is incapacitating or threatening to life (e.g. blindness or carcinoma).

Specify illness, disabilities and duration :

RATE PSYCHOSOMATIC SYMPTOMS.

 (3)

Special projects only

•• HAVE YOU WORRIED A LOT DURING THE PAST MONTH ?

क्या पिछले महीने आपको बहुत ज्यादा चिन्ता रही है ? पिछले महीने से बिमारा बिडा बुरी से ?
(What do you worry about ?)

PROBE : (Money, housing, children, health, work, marriage, relatives; friends, neighbours, other).

(How much do you worry ? Are you a worrier ?)

If any indication of worry, use further probes :

•• WHAT IS IT LIKE WHEN YOU WORRY ? जैसे बिडा उरी से डां रिम उरु मसूम बरु से ?

(What sort of state of mind do you get into ?)

(Do unpleasant thoughts constantly go round and round in your mind ?)

(Can you stop them by turning your attention to something else ?)

RATE WORRYING : A round of painful thought which cannot be stopped and is out of proportion to the subject worried about.

 (4)

1=Symptom definitely present during past month, but of moderate clinical intensity or intense less than 50% of the time.

2=Symptom clinically intense more than 50% of the month.

•• HAVE YOU HAD HEADACHES, OR OTHER ACHES OR PAINS, DURING THE PAST MONTH ?

पिछले महीने क्या आपको सिर दर्द या किसी और तरह की दर्द या पीडा हुई है ? उरु बरु उरी से ?
(What kind?)

RATE ONLY TENSION PAINS, e. g. 'band round head', 'pressure', 'tightness in scalp', 'ache in back of neck', not migraine.

 (5)

1=Symptom definitely present during past month, but of moderate clinical intensity, or intense less than 50% of the time.

2=Symptom clinically intense more than 50% of past month.

•• HAVE YOU BEEN GETTING EXHAUSTED AND WORN OUT DURING THE DAY OR EVENING, EVEN

बिना कोई ज्यादा काम किये भी, सुबह या शाम को आप बहुत ज्यादा थकावट उरी से ?
WHEN YOU HAVEN'T BEEN WORKING VERY HARD ?
(यके थके) महसूस करते हैं ?

RATE TIREDNESS OR EXHAUSTION: Do not include tiredness due to flu, etc.→9.

 (6)

1=Only moderate form of symptom (tiredness) present; or intense form (exhaustion) less than 50% of the time.

2=Intense form of symptom (exhaustion) present more than 50% of the

**** HAVE YOU HAD DIFFICULTY IN RELAXING DURING THE PAST MONTH ?**

पिछले महीने में क्या आपको सुस्तानों या आराम (रिलैक्स) करने में मुश्किल हुई है ?

(Do your muscles feel tensed up ?)

पिछले महीने की तुलना में मुसलदाह जा आराम रहने टिक भूमरिप, उएए उ ?

RATE MUSCULAR TENSION: Do not include a subjective feeling of nervous tension, which is rated later.

 (7)

- 1=Symptom definitely present during past month, but of moderate clinical intensity, or intense less than 50% of the time.
2=Symptom clinically intense more than 50% of past month.

**** HAVE YOU BEEN SO FIDGETY AND RESTLESS THAT YOU COULDN'T SIT STILL ?**

कभी कभी आप इतने बेचैन हो जाते हैं कि आराम से टिक कर बैठ नहीं जाता है ?

RATE RESTLESSNESS.

(Do you have to keep pacing up and down)

उए उए इमी टिके बेचैन उए उ रि आराम आर नही बैठिआ जांदा ?

 (8)

- 1=Only moderate form of symptom (fidgety, restless) present; or intense form (pacing, can't sit down) less than 50% of the time.
2=Intense form of symptom (pacing, etc.) present more than 50% of past month.

**** DO YOU TEND TO WORRY OVER YOUR PHYSICAL HEALTH ?**

क्या आप अपनी शारीरिक सेहत के बारे में चिन्ता करते रहते हैं ?

RATE HYPOCHONDRIASIS: Overconcern with possibility of death, disease or malfunction. Re-rate at end of interview if subject constantly reverts to hypochondriacal preoccupation.

Consider ratings of symptoms (1) and (3).

- 1=Symptom present during past month, but not (2)
2=Subject constantly reverts to hypochondriacal preoccupations during interview.

 (9)

**** DO YOU OFTEN FEEL ON EDGE OR KEYED UP OR MENTALLY TENSE OR STRAINED ?**

क्या आप अक्सर परेशान से रहते हैं जैसे कि आप के मन में कई तरह के खिचाव और शी इमी आराम तनाव रहते हों ?

(Do you generally suffer with your nerves ?)

(Do you suffer from nervous exhaustion ?)

अठेआर उए उ टिके मर टिके खिचाह मडे उआह उए उ ?

RATE SUBJECTIVE FEELING OF 'NERVOUS TENSION':

There is no need for autonomic accompaniments for this symptom to be rated present.

 (10)

- 1=Symptom definitely present during past month, but of moderate intensity, or intense less than 50% of the time.
2=Intense form of symptom present more than 50% of the past month.

**** DO YOU FIND THAT A LOT OF NOISE UPSETS YOU ?**

बहुत ज्यादा शोर होने पर, क्या आप परेशान हो जाते हैं ?

(Do noises sometimes seem to penetrate, or go through your head?)

सिआरा कीर उए उए रि इमी अठेआर उ जांदा उ ?

RATE HYPERSENSITIVITY TO NOISE.

- 1=Moderate degree during month.
2=Severe degree during month.

3. AUTONOMIC ANXIETY

In this section, rate only subjective anxiety with autonomic accompaniments, either free-floating or situational. Do not include worrying or nervous tension. Do not include anxiety due to, e.g., persecutory delusions, except in the special item (no. 13).

(CHECK LIST of autonomic accompaniments:

Blushing	Dry mouth
Butterflies	Giddiness
Choking	Palpitations
Difficulty getting breath	Sweating
Dizziness	Trembling)

** HAVE THERE BEEN TIMES LATELY WHEN YOU HAVE BEEN VERY ANXIOUS OR FRIGHTENED ?

क्या पिछले दिनों कभी ऐसा हुआ कि आप बहुत घबरा गये हों या डर गये हों ?

यिहसे रितां इरे हिम उरा उदिमा रि उमी किआरा उर ना अघरा
(What was this like ?) जटे उ ?

(Did your heart beat fast ?) Ask for other autonomic symptoms.

(How often in the past month?)

RATE FREE-FLOATING AUTONOMIC ANXIETY: Exclude if due to delusions. Exclude if purely situational.

(11)

1=Symptom definitely present, with autonomic accompaniment, during past month, but of moderate clinical intensity, or intense less than 50% of the time

2=Symptom clinically intense more than 50% of the time.

** HAVE YOU HAD THE FEELING THAT SOMETHING TERRIBLE MIGHT HAPPEN ?

आपको कभी ऐसा लगा कि जैसे कोई बहुत बुरी या बहुत खराब बात होने वाली है ?

इसे हिम उरा उरा उरे रि अरा अ अरी जे उरे टासी उ ?
(That some disaster might occur but you are not sure what? Like illness or death or ruination?)

(Have you been anxious about getting up in the morning because you are afraid to face the day?)

(What did it feel like?)

RATE ANXIOUS FOREBODING WITH AUTONOMIC ACCOMPANIMENTS.

(12)

1=Symptom definitely present, with autonomic accompaniment, during past month, but of moderate clinical intensity, or intense less than 50% of the time.

2=Symptom clinically intense more than 50% of the time.

RATE AUTONOMIC ANXIETY DUE TO DELUSIONS, etc. and if necessary defer to end of interview.

(13)

0=No anxiety due to delusions or hallucinations.

1=Subject complains of anxiety but no evidence of anxiety on examination.

2=Clearly anxious or frightened because of delusions or hallucinations.

CUT OFF IF NO EVIDENCE OF ANXIETY OR IF ANXIETY DUE ONLY TO DELUSIONS→SECTION 4.

Cut off

HAVE YOU HAD TIMES WHEN YOU FELT SHAKY, OR YOUR HEART POUNDED, OR YOU FELT SWEATY, AND YOU SIMPLY HAD TO DO SOMETHING ABOUT IT ?

कभी ऐसा हुआ है कि आप इतने कांपने लगे हों, आपका दिल जोर से धड़कने लगा हो, या सारे शरीर पर पसीना आ गया हो, और इसे दूर करने के लिये आपको कुछ न कुछ करना पड़ा हो ?

(What was it like?)

(What was happening at the time?)

(How often during the past month?)

RATE PANIC ATTACKS WITH AUTONOMIC SYMPTOMS:

A panic attack is intolerable anxiety leading to some action to end it. e.g. leaving a bus, phoning husband at work, going in to see a neighbour, etc.

(14)

- 1=One to four panic attacks during month
- 2=Panic attacks five times or more.

DO YOU TEND TO GET ANXIOUS IN CERTAIN SITUATIONS, SUCH AS TRAVELLING, OR BEING ALONE, OR BEING IN A LIFT OR TUBE TRAIN ?

ऐसे मौकों पर जैसे बस या गाड़ी में सफर करने में, या अकेले में, या तंग जगह पर जाने में आप घबरा जाते हैं ?

(CHECK LIST: Can be presented on separate card and each item rated separately, if needed.)

- Crowds (shop, street, theatre, cinema, church).
- Going out alone; being at home alone.
- Enclosed spaces (hairdresser, phone booth, tunnel).
- Open spaces, bridges.
- Travelling (buses, cars, trains.)

RATE SITUATIONAL AUTONOMIC ANXIETY.

(15)

- 1=Has not been in such situations during the past month but aware that anxiety would have been present if the situation had occurred.
- 2=Situation has occurred during the past month and patient did feel anxious because of it.

WHAT ABOUT MEETING PEOPLE, E. G. GOING INTO A CROWDED ROOM, MAKING CONVERSATION ?

लोगों में मिलने जुलने, बात करने या भरी सभा में या ऐसी जगह जाने में जहाँ बहुत भीड़ हो, आप कैसा महसूस करते हैं ?

- Speaking to an audience.
- Eating, drinking or writing in front of other people.
- Parties.)

RATE AUTONOMIC ANXIETY ON MEETING PEOPLE

(16)

- 1=Has not been in such situations during the past month but aware that anxiety would have been present if the situation had occurred.
- 2=Situation has occurred during the past month and patient did feel anxious because of it.

DO YOU HAVE ANY SPECIAL FEARS, LIKE SOME PEOPLE ARE SCARED OF FEATHERS OR CATS OR SPIDERS OR BIRDS ?

क्या आपको किसी खास चीज से डर लगता है, जैसे कि कुछ लोग कीड़े-भकीड़ों से या चूहा, कुत्ता या छिपकली से डरते हैं ?

- Heights, thunderstorms, darkness.
- Animals or insects of any kind.

RATE ONLY SPECIFIC PHOBIAS, NOT GENERAL SITUATIONAL ANXIETY.

4

 (17)

- 1=Has not been in such situations during the past month but aware that anxiety would have been present if the situation had occurred.
- 2=Situation has occurred during the past month and patient did feel anxious because of it.

DO YOU AVOID ANY OF THESE SITUATIONS (SPECIFY AS APPROPRIATE) BECAUSE YOU KNOW YOU WILL GET ANXIOUS?

क्या आप इन अवसरों या मौकों से (जो मरीज पर लागू होते हैं उनको बताइये) दूर रहने की कोशिश करते हैं, क्योंकि इनसे आपको घबराहट होती है?
 (How much does it affect your life?)
 इस उठा दे और डर घबरे से रिडि रि उठाएँ, अचानक उठी है?

 (18)

RATE AVOIDANCE OF ANXIETY-PROVOKING SITUATIONS.

- 1=Subject tends to avoid such situations whenever possible.
- 2=Marked generalisation of avoidance has occurred during past month, e.g. subject has not dared to leave the house or has gone out only if accompanied

Describe anxiety symptoms and list phobias.

4. THINKING, CONCENTRATION, ETC.

** CAN YOU THINK CLEARLY OR IS THERE ANY INTERFERENCE WITH YOUR THOUGHTS?

क्या आप साफ साफ सोच सकते हैं या आपके सोच विचार में किसी तरह की रुकावट/बाधा/विघ्न आती है? सी इमी माठ मीव मरे से मां मीव विचार विचरनी

** DO YOUR THOUGHTS TEND TO BE MUDDLED OR SLOW?

आपके विचारों में कोई गड़बड़ होती हों या उलझ जाते हो या ह्याल बड़े धीरे धीरे आते हों? विचारों विचरनी गड़बड़ उठी से मां विचार, उली उली आते गह?

(Can you make up your mind about simple things quite easily?) Make decisions about everyday matters?)

RATE SUBJECTIVELY INEFFICIENT THINKING (if due to intrusion of alien thoughts, rate 9).

- 1=Symptom definitely present during the past month, but of moderate clinical intensity, or intense less than 50% of the time,
- 2=Symptom clinically intense more than 50% of the past month.

 (19)

** WHAT HAS YOUR CONCENTRATION BEEN LIKE RECENTLY?

इन दिनों आपकी ध्यान लगाने की शक्ति कैसी रही है? अगर किसी काम में ध्यान लगाना हो तो क्या लग जाता है? मीव सी मरडी रिम उठा गहनी से? मीव विच

(Can you read an article in the paper or watch a TV programme right through?) विचार उठाएँ?
 (Do your thoughts drift off so that you don't take things in?)

RATE POOR CONCENTRATION.

- 1=Only moderate form of symptom present during the past month (e.g. can read a short article, can concentrate if tries hard); or intense less than 50% of the time.
- 2=Symptom clinically intense (cannot attempt to read or concentrate) more than 50% of the past month.

 (20)

** DO YOU TEND TO BROOD ON THINGS?

कई बार आप क्या अपने विचारों में उलझ/खोए रहते हैं, जिससे काम में बाधा पड़ती हो? आपसे विचारों विचरनी उलझने मीव से विचार मीव विच उठाएँ

(So much that you even neglect your work?)
 उठी है?

RATE NEGLECT DUE TO BROODING.

- 1=Symptom has caused moderate impairment to work or social relationships.
- 2=Marked impairment.

 (21)

** WHAT ABOUT YOUR INTERESTS, HAVE THEY CHANGED AT ALL ?

आपके शौक कैसे हैं, क्या इनमें कोई फरक पड़ा है? **उंगड़े औरों दिव रीं ठंर आदिमा ५ ?**
 (Have you lost interest in work, or hobbies, or recreations?)
 (Have you let your appearance go?)

(22)

RATE LOSS OF INTEREST *continuing during the past month.*

- 1=Symptom definitely present during the past month, but of moderate clinical severity or severe loss less than 50% of the time.
- 2=Symptom clinically severe more than 50% of the past month.

** HAVE YOU BECOME INTERESTED IN NEW THINGS AT ALL ?

क्या इन दिनों कोई नया शौक पैदा हुआ है ?

IF EVIDENCE OF EXPANSIVE MOOD OR IDEAS → SECTION 9.

IF ODD IDEAS, EXPLORE FURTHER. PROCEED TO SECTION 15 IF APPROPRIATE.

** HAVE YOU SUFFERED ANY LAPSES OF MEMORY RECENTLY ? (PROBE ONLY)

क्या हाल में ऐसा हुआ है कि आप चीजें भूल जाते हों ? ऐसा लगता है कि आपकी याददाश्त कमजोर हो गई है ? **गए, दिव लगरा ५ रि उमी उल नारे ५ नां आदशमड**

IF EVIDENCE OF DISSOCIATION OR ORGANIC MEMORY LOSS → **रमकीर उ गरी ५ ?**
 SECTION 16.

ANSWERS TO THESE QUESTIONS MAY SUGGEST THAT OTHER TYPES OF THOUGHT DISORDER ARE PRESENT, IF NOT, CUT OFF SECTION 5.

Cut Off

IF ANY EVIDENCE OF THOUGHT DISORDER:
 ARE YOU IN FULL CONTROL OF YOUR THOUGHTS ?

क्या आपके विचार आपके वश में हैं ? या ऐसा लगता है कि विचार अपने वश में नहीं ?

CAN PEOPLE READ YOUR MIND ? **री उंगड़े दिवार उंगड़े हम दिव ५ नां**

क्या लोग आपके मन की बात बिना बताये भी जान लेते हैं ? **उमी घिरा री गल ममड**

IS ANYTHING LIKE HYPNOTISM OR TELEPATHY GOING ON ? **गारे ५ ?**

ऐसा लगता है कि कोई आप पर जादू-टोना कर रहा है ? **लगरा ५ रि उंगड़े उ रीं नांरु टेहा**
 IF NECESSARY, PROCEED TO SECTION 13. **रु ठिग ५ ?**

5. DEPRESSED MOOD

** DO YOU KEEP REASONABLY CHEERFUL OR HAVE YOU BEEN VERY DEPRESSED OR LOW-SPIRITED RECENTLY ?

आजकल आपका मन कैसा रहता है ? आमतौर पर क्या आप खुश रहते हैं या इन दिनों आप उदास रहे हों और आपको कुछ भी अच्छा न लगता हो ? **आदशमड, उंगडा दिव, रिम उवां**

HAVE YOU CRIED AT ALL ? **गिंरं ५ ? आम उर ५ उमी अम गरे ५**

क्या आपको कभी रोना भी आया है ? **कां दिराम गे ५ कां उमी र लगरा**

(When did you last really enjoy doing anything ?) **उटे ना ठेहा आदिमा उटे ?**

RATE DEPRESSED MOOD. N. B. *When rating clinical severity of depression remember that deeply depressed people may not necessarily cry. See definition in glossary.*

- 1=Only moderately depressed during past month, or deep depression for less than 50% of the time and tending to vary in intensity.
- 2=Deeply depressed for more than 50% of the past month, and tending to be unvarying in intensity

HOW DO YOU SEE THE FUTURE ?

आपको अपना भविष्य कैसा लगता है—आने वाले समय की तरफ देखें तो कैसा लगता है ?

(Has life seemed quite hopeless?)

कुछ भी नज़र नहीं आता ?

(Can you see any future?)

उसके लिए कुछ भी नहीं है ?

(Have you given up or does there still seem some reason for trying?)

 (24)

RATE HOPELESSNESS on subject's own view at present.

1=Hopelessness of moderate intensity but still has some degree of hope for the future (irrespective of time during month.)

2=Intense form of symptom (patient has given up hope altogether).

USE JUDGEMENT ABOUT WORDING.

HAVE YOU FELT THAT LIFE WASN'T WORTH LIVING ?

कभी ऐसा भी लगता है कि यह जीवन बेकार है, इससे तो मर जाए तो अच्छा है ?

(Did you ever feel like ending it all?)

उसके लिए कुछ भी नहीं है ?

(What did you think you might do?)

मरना चाहा ?

(Did you actually try?)

 (25)

RATE SUICIDAL PLANS OR ACTS.

1=Deliberately considered suicide (not just a fleeting thought) but made no attempt.

2=Suicidal attempt but subject's life never likely to be in serious danger, except unintentionally.

3=Suicidal attempt apparently designed to end in death (i. e. accidental discovery or inefficient means).

N. B. Examiner should judge clinically whether there was intent to end life or not. If in doubt, assume not.

Cut off	
---------	--

IF EVIDENCE OF BOTH DEPRESSION AND ANXIETY RATE ANXIETY OR DEPRESSION PRIMARY.

If subject suffers from both anxiety and depression, and both have been rated as present, try to decide which is primary.

Which seems worse, the depression or the anxiety? (Use patient's own terms).

आपको ज्यादा तकलीफ किस से रहती है—दबराहट से या उदासी से ?

0. Anxiety is primary. Depression appears to be entirely explicable

in terms of the limitations placed on the subject by the symptoms of anxiety, e. g. being unable to leave the house, travel, meet people, etc., or being afraid of heart disease because of palpitations.

1. Anxiety and depression both present but seem independent of each other or it is not possible to decide whether one of them is primary.

2. Depression is primary. Anxiety is either a result of the depression (e.g. subject is frightened because of morbid or suicidal ideas) or it takes the form of fears of catastrophe, forebodings about illness or death, dread of having to face the day when first waking in the morning, preoccupation that something awful is going to happen. Panic attacks and situational anxiety, if present, are secondary to depression.

 (26)

IS THE DEPRESSION WORSE AT ANY PARTICULAR TIME OF DAY?

क्या किसी खास समय उदासी ज्यादा होती है - जैसे दिन को या रात को ?

RATE MORNING DEPRESSION (*particularly on waking*)

12
रिपट देखें काम डिरामी तरी उ
दिये नां राउं ?

0=No depression.

1=Not specially marked in mornings.

2=Specially marked in mornings.

(27)

6. SELF AND OTHERS

** HAVE YOU WANTED TO STAY AWAY FROM OTHER PEOPLE ?

क्या आप दूसरे लोगों से परे/दूर/अलग रहना पसन्द करते हैं ? की तुमी' हूजे जैरां उं थवे/दूर
(Why ?) रगडा थमीर उठरे उं ?

(Have you been suspicious of their intentions ? Of actual harm ?)

RATE SOCIAL WITHDRAWAL

1=Only passive form of symptom, i. e. subject does not seek company but does not refuse it if offered; or, if active withdrawal, less than 50% of the month.

2=Actively avoids company (refuses it if offered). Actively withdraws in this way for more than 50% of the month.

(28)

** WHAT IS YOUR OPINION OF YOURSELF COMPARED TO OTHER PEOPLE ?

दूसरे लोगों के मुकाबले, आपकी अपने बारे में क्या राय है ? क्या आप अपने को दूसरों से
घटिया समझते हैं ? कृमिणां दे भुराघरे मपही री राउं उं ? की तुमी' मपहडे
(Do you feel better, or not as good, or about the same as most ?) आम ही मपिमा समझरे उं ?

(Do you feel inferior or even worthless ?)

RATE SELF-DEPRECIATION.

1=Some inferiority, not amounting to feeling of worthlessness. If subject considers self to be worthless, this intense form of the symptom is present less than 50% of the time.

2=Subject considers self to be completely worthless. Symptom present more than 50% of the month

(29)

** HOW CONFIDENT DO YOU FEEL IN YOURSELF ?

आपको अपने आप पर कितना आत्मविश्वास/भरोसा है ? मपहडे आम उं उगरी रिनि उठे म।
(For example, in talking to others, or in managing your relations with other
नां आउम रिणडाम उं ?
people ?)

RATE LACK OF SELF-CONFIDENCE WITH OTHER

PEOPLE. Consider only competence in social relationships, not competence at mechanical work, etc.

1=Moderate lack of self-confidence, or intense lack less than 50% of the month.

2=Intense lack of self-confidence, more than 50% of the month.

(30)

** ARE YOU SELF-CONSCIOUS IN PUBLIC ? की तुगरी नगरा उं रि नर तुगरी

क्या आपको लगता है कि लोग खासतौर से आपको ज्यादा देखते हैं ? आम उठे उं निमारा देखरे उं ?

(Do you get the feeling that other people are taking notice of you in the street or a bus or a restaurant ?)

(Do they ever seem to laugh at you or talk about you critically ?)

(Do you consider people really are looking at you, or is it perhaps the way you feel about it ?)

RATE SIMPLE IDEAS OF REFERENCE (NOT DELUSIONS).

1=Marked self-consciousness only (irrespective of time during month).

2=Feels that people are criticising or laughing at self but can be reassured.

(31)

IF NO EVIDENCE OF GUILT, CUT OFF → SECTION 7.
(IF EVIDENCE OF MISINTERPRETATIONS, DELUSIONS OF REFERENCE
OR PERSECUTION → SECTIONS 15 B, 15 C.)

Cut Off	
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IF EVIDENCE OF GUILT:

DO YOU HAVE THE FEELING THAT YOU ARE BEING BLAMED
FOR SOMETHING, OR EVEN ACCUSED?
WHAT ABOUT?

क्या ऐसा महसूस होता है कि आपको कसूरवार ठहराया जा रहा है, और यहां तक कि
आप पर इलजाम लगाये गये हैं- किन बातों के बारे में? *की लगरा है कि तुम्हारी शर्मनाक ठहराव*
RATE GUILTY IDEAS OF REFERENCE. *मा ठिग है का ठिहनाम लगाविया काँरा है? कि प्र*
जहाँ है? (32)
Do not include justifiable blame or accusation. Exclude delusions of guilt.

- 1 = Subject feels blamed but not accused (irrespective of time during month).
- 2 = Subject feels accused of some sin or misdemeanour. Not delusional

IF DELUSIONS OF REFERENCE MAY BE PRESENT → SECTION 15 B.

DO YOU TEND TO BLAME YOURSELF AT ALL?

क्या आप अपने आप को दोष देते हैं? *की तुमी अपने आप को दोष देते हैं? शर्मनाक/ शर्मनाक/*
(If people are critical, do you think you deserve it?) *दिहते है?* (33)

RATE PATHOLOGICAL GUILT ONLY.

- 1 = Subject feels over-guilty about some peccadillo (irrespective of time during month).
- 2 = Subject feels to blame for everything that has gone wrong even when not his fault, but not delusional.

IF DELUSIONS OF GUILT MAY BE PRESENT → SECTION 15 G.

DO YOU BLAME ANYONE ELSE FOR YOUR TROUBLES?

क्या आप अपनी तकलीफों के लिये किसी और को दोषी मानते हैं? *आपकी तकलीफों के लिये की तुमी*
IF DELUSIONS OF PERSECUTION → SECTION 15 C. *दिहते है कि तुमी शर्मनाक/ शर्मनाक/*

7. APPETITE, SLEEP, RETARDATION, LIBIDO

** WHAT HAS YOUR APPETITE BEEN RECENTLY?

इन दिनों आपकी भूख कैसी रही है? *दिहते है कि तुमी उतरी वजन किम उतरी वजन?*
(Have you lost any weight during the past three months?)

RATE LOSS OF WEIGHT DUE TO POOR APPETITE.

Do not include changes due to physical illness.

- 1 = Less than 7 lb (3.5 kg).
- 2 = 7 lb (3.5 kg) or more.

 (34)

** HAVE YOU HAD ANY TROUBLE GETTING OFF TO SLEEP
DURING THE PAST MONTH?

पिछले महीने, आपको नींद आ जाने में कोई तकलीफ रही? *पिछले महीने की निंदर माह*
(How long do you lie awake?) *दिहते है कि तुमी उतरी वजन?*
(What happens if you take sleeping tablets?)
(How often does it happen?)

RATE DELAYED SLEEP.

1=One hour or more delay (irrespective of sleeping tablets).

2=Two hours or more delay (irrespective of sleeping tablets).

(In either case, ten or more nights during month).

 (35)

** DO YOU SEEM TO BE SLOWED DOWN IN YOUR MOVEMENTS, OR TO HAVE TOO LITTLE ENERGY RECENTLY? HOW MUCH HAS IT AFFECTED YOU?

आपको ऐसे लगता है कि आप सुस्त हो गये हैं, कामकाज बड़ा धीरे धीरे करते हैं, जैसे **री लगरा ५ रि**
कि आपमें ताकत कम हो? इसका आप पर कितना असर पड़ा है? **उसी मसत ५ गये ५ का ५ म**
(Do things seem to be moving too fast for you?) **उसी उसी खरे ५ का उरत ५ ५ गरी**

RATE SUBJECTIVE ANERGIA AND RETARDATION.

1=Marked subjective listlessness and lack of energy.

2=Marked retardation and underactivity (Irrespective of time during month).

 (36)

IF NO APPETITE OR SLEEP DISTURBANCE, AND NO DEPRESSION,
CUT OFF → SECTION 8.

Cut off

IF SLEEP DISTURBANCE OR DEPRESSION:

DO YOU WAKE EARLY IN THE MORNING? **उठने के खर ५ थगले ५ रि**क्या सबेरे उठने के टाइम से पहले ही नींद खुल जाती है? **रीरत थग नाची ५?** (37)

RATE EARLY WAKING (one hour before usual).

1=One hour or more before ordinary time.

2=Two hours or more before ordinary time.

(In either case, ten or more nights during month.)

HAS THERE BEEN ANY CHANGE IN YOUR INTEREST IN SEX?

क्या आपकी सेक्स की इच्छा, जैसे आदमी औरत के सम्बन्ध की इच्छा होती है—इसमें **में ५ मरी**
कोई फरक पड़ा है? **(में ५ मरी / भारती / मरत) रि ५ ५ गरी ५ का**

RATE LOSS OF LIBIDO WITHIN PRESENT EPISODE OF ILLNESS AND PERSISTING DURING PAST MONTH. **उसी खर थग ५?**

1=Marked loss of interest and performance.

2=Almost total loss of libido.

 (38)

DOES THE DEPRESSION OR TENSION GET WORST JUST BEFORE THE START OF THE MONTHLY PERIOD?

क्या आपकी उदासी या मन में खिचाव-तनाव, माहवारी शुरू होने के पहले बढ़ जाते हैं?

RATE PREMENSTRUAL EXACERBATION **उसी का मर रि ५ उरत भारती**

0=No definite exacerbation,

1=Marked exacerbation.

 (39)

8. IRRITABILITY

** HAVE YOU BEEN VERY MUCH MORE IRRITABLE THAN USUAL RECENTLY?

क्या इन दिनों आप पहले से बहुत ज्यादा चिढ़चिड़े हो गये हैं? **री उसी थग का मर चिढ़ चिड़े**
(How do you show it?) **५ गये ५?**

(Do you keep it to yourself, or shout, or even hit people?)

RATE IRRITABILITY.

1=Keeps irritation to himself.

2=Shows anger by shouting or quarrelling.

3=Shows anger by hitting people, throwing or breaking things.

 (40)

9. EXPANSIVE MOOD AND IDEATION

** HAVE YOU SOMETIMES FELT PARTICULARLY CHEERFUL AND ON TOP OF THE WORLD, WITHOUT ANY REASON ?

क्या आपको कभी बिना किसी खास वजह के बेहद खुशी महसूस हुई है ? श्रे इगरी घिरा दका
(Too cheerful to be healthy ?)
(How long does it last ?)
घोर खूनी भगसुस उही उई ?

RATE EXPANSIVE MOOD : *not ordinary high spirits.*

1=Moderately expansive mood (euphoria with marked element of inappropriateness or excitement, whether recognised by subject or not), present during past month, and persistent for hours at a time.* *Do not include transient high spirits. Not necessarily described by subject.*

2=Intense form of symptom (elation or exaltation) definitely present during past month and persistent for hours at a time. Described by subject.

** HAVE YOU FELT PARTICULARLY FULL OF ENERGY LATELY, OR FULL OF EXCITING IDEAS ?

पिछले महीने आपने ऐसा महसूस किया जैसे कि आपमें बहुत ताकत या चुरती आ गई हो या मन में नये नये विचार आने लग गये हों ?
(Do things seem to go too slowly for you ?)
(Do you need less sleep than usual ?)
(Do you find yourself extremely active but not getting tired ?)
(Have you developed new interests recently ?)
यिछले महीने इगरी भगसुस उईआ उ रि
उरउ नां भूमडी आ गही उई नां भ
दिन रहे रहे टिछा आह का गहे उर ?

RATE SUBJECTIVE IDEOMOTOR PRESSURE.

1=Subjective equivalent of flight of ideas. Images and ideas flash through the mind, each suggesting others, at a faster rate than usual. State persists for hours at a time.* Definitely occurred during past month.

2=As (1) but accompanied by very high energy output and activity which does not seem to make subject tired at the time. Definitely occurred during past month and persisted for hours at a time.*

IF NO EVIDENCE OF EXPANSIVE MOOD ADD IDEATION, CUT OFF→ SECTION 10.

Cut off

IF EVIDENCE OF EXPANSIVE MOOD AND IDEATION :

HAVE YOU SEEMED SUPER-EFFICIENT AT WORK, OR AS THOUGH YOU HAD SPECIAL POWERS OR TALENTS QUITE OUT OF THE ORDINARY ?

क्या लगता है कि आप अपने काम में बहुत माहिर हो गये हैं या आप में खास शक्ति या गुण आ गये हों जो कि आम आदमी में नहीं होते ?

HAVE YOU FELT SPECIALLY HEALTHY ?

क्या आपकी सेहत पहले से बहुत अच्छी हो गई है ?

HAVE YOU BEEN BUYING ANY INTERESTING THINGS RECENTLY ?

क्या इन दिनों आप पहले से ज्यादा नयी नयी चीजें खरीदने लगे हैं ? क्या आप पहले से री इगरी खरिदां खरीद रहे हैं ?

RATE GRANDIOSE IDEAS AND ACTIONS.

1=Subjective feeling of superb health, exceptionally high intelligence, extraordinary abilities, etc. Persistent for hours at a time.* Symptom occurred at some time during the month.

2=Grandiose ideas have been translated into action during the month, e. g. overspending, gambling, etc. under the influence of grandiose ideas and expansive affect. *Do not include compulsive gambling unless clearly of this type.*

(→GRANDIOSE DELUSIONS, SECTION 15D IF NECESSARY.)

*If symptom was more transient but very intense or frequently repeated it may still be included.

(41)

(42)

10. OBSESSIONS

These symptoms are usually experienced as occurring against conscious resistance
(see definition in glossary).

16

****DO YOU FIND THAT YOU HAVE TO KEEP ON CHECKING THINGS THAT YOU KNOW YOU HAVE ALREADY DONE ?**

ਇਸ ਤਰ੍ਹਾਂ ਹੋਣਾ ਤਾਂ ਜਿਹੜੀ

ਕਿ ਆਪਣੇ ਹੋਣਾ ਹੈ ਕਿ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ ਬਾਰ ਬਾਰ ਜਾਂਚ, ਚੈਕ ਕਰਨੇ ਵਾਲਾ ਪੜ੍ਹਾ ਹੈ, ਯਹ ਘਾਟ ਘਾਟ ਚੀਜ਼ਾਂ ਖੋਲ੍ਹ
ਜਾਨਦੇ ਹੋਏ ਆਪ ਆਪਣੇ ਵੱਲੋਂ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ ਚੈਕ ਕਰ ਚੁੱਕੇ ਹੋਏ ?

ਘਾਟ ਘਾਟ ਚੀਜ਼ਾਂ ਖੋਲ੍ਹ
ਜਿਹੜੀ ਚੀਜ਼ਾਂ ਨੂੰ ਆਪਣੇ ਵੱਲੋਂ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ ਚੈਕ ਕਰ ਚੁੱਕੇ ਹੋਏ ?

(Like gas taps, doors, switches, etc.)

(Do you have to touch or count things many times or repeat the same action over and over again ?)

(What happens when you try to stop ?)

RATE OBSESSIVE CHECKING AND REPEATING.

(44)

1=Symptom of moderate intensity or, if severe, present less than 50% of the time.

2=Symptom present in severe degree, more than 50% of the past month.

****DO YOU SPEND A LOT OF TIME ON PERSONAL CLEANLINESS LIKE WASHING OVER AND OVER EVEN THOUGH YOU KNOW YOU ARE CLEAN? WHAT ABOUT TIDINESS?**

ਅਪਣੀ ਸਫ਼ਾਈ ਟਿਕਾਣੀ ਤੁਸੀਂ

ਅਪਣੀ ਸਫ਼ਾਈ 'ਤੇ ਕੀ ਆਪ ਬਹੁਤ ਜ਼ਿਆਦਾ ਟਾਈਮ ਲਗਾਉਂਦੇ ਹੋ, ਜਿਵੇਂ ਕਿ ਬਾਰ ਬਾਰ ਨਹਾਉਣਾ, ਹਾਥ ਧੋਣਾ ਜਿਹਨਾਂ ਟਾਈਮ
ਧੋਣਾ, ਯਹ ਜਾਨਦੇ ਹੋਏ ਆਪ ਸਾਫ਼ ਹੋਏ ? ਕੀ ਚੀਜ਼ਾਂ ਨੂੰ ਸਜਾਉਣ ਵਾਲੇ ਸਮੇਂ ਆਪ ਜ਼ਿਆਦਾ ਟਾਈਮ
ਲਗਾਉਂਦੇ ਹੋਏ ?

ਲਗਾਉਂਦੇ ਹੋਏ ਆਪ ਜ਼ਿਆਦਾ ਟਾਈਮ

(Do you get worried by contamination with germs ?)

(Do you have other rituals ?)

(What happens when you try to stop ?)

ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ ਸਜਾਉਣ ਵਾਲੇ ਟਿਕਾਣੇ
ਜਿਹਨਾਂ ਟਿਕਾਣੇ ਲਗਾਉਂਦੇ ਹੋਏ ?

RATE OBSESSIVE CLEANLINESS AND SIMILAR RITUALS.

(45)

1=Symptom of moderate intensity or, if severe, present less than 50% of the time.

2=Symptom present in severe degree, more than 50% of the past month.

****DO YOU FIND IT DIFFICULT TO MAKE DECISIONS EVEN ABOUT TRIVIAL THINGS ?**

ਜਿਹਨਾਂ ਟਿਕਾਣੇ ਟਿਕਾਣੇ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ

ਕੀ ਛੋਟੀ ਛੋਟੀ ਚੀਜ਼ਾਂ ਨੂੰ ਫੈਸਲਾ ਕਰਨੇ ਵਾਲੇ ਸਮੇਂ ਆਪ ਬਹੁਤ ਮੁਸ਼ਕਿਲ ਹੋ ਜਾਂਦੇ ਹੋਏ ? ਟਿਕਾਣੇ ਟਿਕਾਣੇ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ

ਟਿਕਾਣੇ ਟਿਕਾਣੇ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ

(Do you constantly have to question the meaning of the universe ?)

(Do you get awful thoughts coming into your mind even when you try to keep them out ?)

(What happens when you try to stop ?)

RATE OBSESSIVE IDEAS AND RUMINATION.

(46)

1=Symptom of moderate intensity or, if severe, present less than 50% of the time.

2=Symptom present in severe degree, more than 50% of the past month.

11. DEREALISATION AND DEPERSONALISATION

****HAVE YOU HAD THE FEELING RECENTLY THAT THINGS AROUND YOU WERE UNREAL ?**

ਜਿਹਨਾਂ ਟਿਕਾਣੇ ਟਿਕਾਣੇ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ

ਜਿਹਨਾਂ ਟਿਕਾਣੇ ਟਿਕਾਣੇ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ ਵੱਲੋਂ ਵੱਲੋਂ ਮਹਸੂਸ ਹੋਣੀ ਹੈ ? ਟਿਕਾਣੇ ਟਿਕਾਣੇ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ

ਟਿਕਾਣੇ ਟਿਕਾਣੇ ਆਪਣੇ ਚੀਜ਼ਾਂ ਨੂੰ

(As though everything was an imitation of reality, like a stage set, with people acting instead of being themselves ?)

(What is it like ? How do you explain it ?)

RATE DEREALISATION.

(47)

1=Moderately intense form of symptom definitely occurred during the past month, and persisted for hours at a time. Things appear colourless and artificial, people appear lifeless and seem to act rather than being themselves.

2=Intense form of symptom occurred during the past month and persisted for hours at a time, e. g. whole world appears like a gigantic stage set, with imitation instead of real objects and puppets instead of people. (If delusional, do not rate here but symptom 90.)

** HAVE YOU YOURSELF FELT UNREAL, THAT YOU WERE NOT A PERSON, NOT IN THE LIVING WORLD ?

क्या आप खुद भी बदले बदले महसूस करते हैं या जैसे वास्तव में इत्सान नहीं हैं या इस दुनिया में नहीं हैं ? **ही उमी' माय घरने धरने भगसुम रररे उ मां ममलिहउ**

(Or that you were outside yourself, looking at yourself from outside ?) **हिस हिसिआ रगी उ मां हिस हिसिआ हिस रगी उ ?**
(Or that you look unreal in the mirror ?)
(Or that some part of your body did not belong to you ?)
(How do you explain it ?)

RATE DEPERSONALISATION

(48)

- 1=Moderately intense form of the symptom definitely occurred during the past month and persisted for hours at a time. Subject feels himself unreal, a sham, a shadow.
- 2=Intense form of symptom definitely occurred during the past month and persisted for hours at a time. Subject feels he is dead, not a person, living in a parallel existence, a hollow shell, even that he does not exit. (If delusional, do not rate here but symptom 90.)

12. OTHER PERCEPTUAL DISORDERS (NOT HALLUCINATIONS)

** DO YOU EVER GET THE FEELING THAT SOMETHING ODD IS GOING ON WHICH YOU CAN'T EXPLAIN ? **ही उगरी लगता उ रि रीही अनिघ**

क्या आपको ऐसा लगता है, जैसे कोई चीज अजीब सी हो रही है, जिसे आप ठीक से **भीन उ रगी उ निमरु** समझ नहीं पा रहे ? **उमी' ममरु रगी मररे ?**

(Or that familiar surroundings seem strange ? How do you explain it ?)

RATE DELUSIONAL MOOD : *The subject feels that his familiar environment has changed in a way which puzzles him and which he may not be able to describe clearly. The feeling often accompanies delusion formation.*

(49)

- 1=Symptom definitely present. No delusions have actually been formulated, though patient may feel that various delusional explanations are possible.
- 2=Full delusional elaboration has occurred.

** DOES YOUR IMAGINATION SOMETIMES PLAY TRICKS ON YOU ? **ही उगडी रलपहना** क्या आपकी कल्पना आपको धोखा (सुनने- देखने में धोखा) भी दे जाती है ? **उगरी धोखा दे जाती उ ?**

** IS THERE ANYTHING UNUSUAL ABOUT THE WAY THINGS LOOK OR SOUND, OR SMELL, OR TASTE ? **ही हिस उरु लगता उ री चीजों री** क्या ऐसे लगता है कि चीजों की शबल, आवाज, गंध या स्वाद अजीब है, वैसे नहीं है जैसे **मरए, मरुआ, घुआ** कि होना चाहिये ? **मरए अनिघ उह उरु उरु रगी**

(Does your body function normally ?)
(Is your own appearance normal ?)

हिस उरु उहे बाजिरे रे ?

CONTINUE BELOW CUT-OFF IF NECESSARY, EVEN IF (49) NOT PRESENT.

IF NO PERCEPTUAL ABNORMALITY→SYMPTOM 54.

Cut off

IF THERE IS ANY HINT OF PERCEPTUAL ABNORMALITY, CONTINUE BEYOND CUT-OFF AND ALSO CONSIDER LATER SECTIONS.
RATE ONLY BASIC EXPERIENCE, NOT DELUSIONAL ELABORATION.

- ** IN WHAT WAY ? DO SOUNDS SEEM UNNATURALLY CLEAR OR LOUD, OR THINGS LOOK VIVIDLY COLOURED OR DETAILED ?

क्या आवाजें कुछ ज्यादा ही साफ और ऊंची महसूस होने लगी हैं ? या हर चीज बड़ी रंगीन और साफ साफ दिखाई देने लगी है ?

(How do you explain this ?)

RATE HEIGHTENED PERCEPTION : e. g. subject intensely aware of cracks in a wall, details of a wallpaper pattern, colours in a picture. Sounds heard with exceptional clarity, music appears particularly beautiful.

 (50)

1=Subject unable to describe the symptom precisely, but examiner thinks it is likely to have been present at some time during the past month.

2=Subject describes symptom. Definitely present at some time (even if only briefly) during the past month.

- ** DO THINGS SEEM DARK OR GREY OR COLOURLESS ?

क्या चीजें काली-सी, धुंधली-सी या बेरंगी-सी महसूस होने लगी हैं ?

(How do you explain it ?)

RATE DULLED PERCEPTION : The reverse of symptom (50). Things look, sound and taste dull, flat, colourless and uninteresting.

 (51)

1=Subject unable to describe the symptom precisely, but examiner thinks it is likely to have been present at some time during the past month.

2=Subject describes symptom. Definitely present at some time (even if only briefly) during the past month.

- ** DOES THE APPEARANCE OF THINGS OR PEOPLE CHANGE IN A PUZZLING WAY: E.G. DISTORTED SHAPES OR SIZE OR COLOUR ?

क्या लोग या चीजें कुछ अजीब ढंग से बदली-बदली नजर आती हैं—जैसे उनकी शकल बदल गई हो या छोटी-बड़ी लगती हों या रंग में फरक लगता हो ?

(How do you explain it ?)

RATE CHANGED PERCEPTION,

क्या चीजें अजीब ढंग से बदलती हैं ?

 (52)

1=Subject unable to describe the symptom precisely, but examiner thinks it is likely to have been present at some time during the past month.

2=Subject describes symptom. Definitely present at some time (even if only briefly) during the past month.

- ** DO YOU THINK YOUR OWN APPEARANCE IS NORMAL ?

ऐसा लगता है कि इन दिनों आपकी शकल—सूरत में कोई फरक आ गया है ?

(Conviction that nose is too large, teeth, misshapen, body crooked, etc. Ask questions here if convenient but rate symptom (89).)

- ** DOES YOUR EXPERIENCE OF TIME SEEM TO HAVE CHANGED ?

क्या आपको ऐसे लगता है कि समय बहुत तेजी से या बहुत धीरे धीरे बीत रहा है ?

(Does it go too fast or too slowly, or do you seem to live through experiences exactly as you have had them before ?)

RATE CHANGED PERCEPTION OF TIME, INCLUDING DEJA VU.

 (53)

1=Subject unable to describe the symptom precisely, but examiner thinks it is likely to have been present at some time during the past month.

2=Subject describes symptom. Definitely present at some time (even if only briefly) during the past month.

DO YOU HEAR SEVERAL VOICES TALKING ABOUT YOU ?

क्या ऐसे लगता है कि कई आवाजें आपके बारे में बातें करती हैं ?

DO THEY REFER TO YOU AS 'HE' (SHE) ?

क्या यह आवाजें आपको 'वह' कह कर बुलाती हैं, जैसे कि 'वह ऐसे है', या 'वह यह कर रहा है', वगैरह ?

(What do they say ?)

(Do they seem to comment on what you are thinking, or reading, or doing ?)

RATE VOICE(S) DISCUSSING SUBJECT IN THIRD PERSON
OR COMMENTING ON THOUGHTS OR ACTIONS (NOT
BASED ON DEPRESSION OR ELATION).

Do not include muttering or whispering if subject cannot make out words, Exclude 'dissociative' hallucinations (symptom 64). Do not include voice calling name or affectively based verbal hallucinations (symptom 61). There may be one voice commenting on subject's thoughts or actions, or several voices discussing the subject in the third person.

RECORD EXAMPLES

1—Hears a voice or voices commenting on thoughts or actions in third person (e.g. 'Now he's going to go to bed' or 'Why would he think a thing like that ?') (2) not present.

2—Hears voices talking about him/her in third person (e.g. 'I think he's a homosexual, don't you ?' 'Yes, he wears a pink pullover, that's a sign of it.'). (1) may also be present.

DO THEY SPEAK DIRECTLY TO YOU ?

क्या ये आवाजें सीधे आपसे बातचीत करती हैं ?

(Are they threatening or unpleasant ?)

(Do they call you names ?)

DO THEY GIVE ORDERS ? (DO YOU OBEY ?)

क्या ये आवाजें आपको हुकम (आदेश) भी देती हैं ?

RATE VOICE(S) SPEAKING TO SUBJECT (NOT BASED ON
DEPRESSION OR ELATION).

Include voice(s) speaking directly to subject, whether accusing, threatening, giving orders or giving information. Exclude voice(s) calling name or based on depression or elation (symptom 61), or commenting on subject's thoughts or actions (symptom 62). Exclude 'dissociative' hallucinations (symptom 63).

RECORD EXAMPLES.

1—Pleasant, supportive or neutral voice(s), not based on affect. No hostile voices.

2—Hostile, threatening or accusing voice(s), thought to be undeserved and not based on affect.

N.B. If single isolated words, even with neutral affect, include under 61(1).

CAN YOU CARRY ON A TWO-WAY CONVERSATION WITH—?

क्या आप भी उनसे बातचीत कर सकते हैं ?

(You can reply, and then—replies to you, and you reply again, just as in an ordinary conversation ?)

(Do you see anything, or smell anything, at the same time as you hear the voice ?)

(Who is it you are talking to ?)

(What is the explanation ?)

(Do you know anyone else who has this kind of experience ?)

RATE 'DISSOCIATIVE' HALLUCINATIONS (VERBAL
AND/OR OTHER).

(64)

The subject can hold a two-way conversation with a presence (variously described as a person, ghost, spirit, god, etc.) which may also be sensed in other ways, e.g. visually or by touch or smell. Often connected with people with whom the subject has had strong affective ties. Visual hallucinations can occur alone. There is usually a strong subcultural colouring, e.g. the subject belongs to a religious sect or to a subcultural group which sanctions hallucinatory experiences, or the subject has been under the influence of someone who is involved with such practices. Exclude hypnogogic hallucinations.

RECORD EXAMPLES.

1 = 'Dissociative' hallucinations present. Subject belongs to subcultural group or sect in which such experiences are sanctioned.

2 = 'Dissociative' hallucinations present. Subject does not belong to sub-cultural group as in (1). If not known, rate (1).

ARE THESE VOICES IN YOUR MIND OR CAN YOU HEAR THEM THROUGH YOUR EARS ?

क्या ये आवाजें आपके मन से उठती हैं या बाहर से आती हैं और कानों से सुनाई देती हैं ?

Scoring :

1 = Subject hears both pseudo-hallucinations (within mind) and true hallucinations (through ears).

2 = Subject hears pseudo-hallucinations only.

3 = Subject hears true hallucinations only.

HOW DO YOU EXPLAIN THE VOICE ?

ये आवाजें कहां से आती हैं, क्यों आती हैं, कैसे आती हैं, क्या इसके बारे में कुछ बताना सकते हैं ?

RECORD EXPLANATION.

14B. VISUAL HALLUCINATIONS

IF QUESTION HAS NOT BEEN COVERED IN SECTION 12 OR 14A, ASK:

** HAVE YOU HAD VISIONS, OR SEEN THINGS OTHER PEOPLE COULDN'T SEE ?

क्या आपको ऐसी चीजें दिखाई देती हैं जिन्हें दूसरे लोग नहीं देख सकते, केवल आप ही देख सकते हैं ?

IF NO EVIDENCE, HERE OR ELSEWHERE, FOR VISUAL HALLUCINATIONS CUT-OFF → SECTION 15.

Cut off

IF ANY EVIDENCE OF VISUAL HALLUCINATIONS :

WITH YOUR EYES OR IN YOUR MIND ?

क्या ये चीजें आपके मन में होती हैं या आखों से साफ साफ दिखाई देती हैं ?

WHAT DID YOU SEE ?

आपने क्या देखा था ?

WERE YOU HALF ASLEEP AT THE TIME ?

क्या उस समय आप थोड़ी थोड़ी नींद में थे ?

HAS IT OCCURRED WHEN YOU WERE FULLY AWAKE ?

जब आप पूरे जाग रहे हों, क्या ऐसा कभी हुआ ?

DID YOU REALISE YOU WERE 'SEEING THINGS' ?

उस समय पता था कि यह ग़ोपरी या बाहरी चीज़ दीख रही है ?

DID THE VISION SEEM TO ARISE OUT OF A PATTERN ON THE WALLPAPER OR A SHADOW ?

क्या ऐसे लगा कि जो आप देख रहे हैं वह किसी परछाई या तस्वीर से निकल रहा है ?

HOW DO YOU EXPLAIN IT ?

यह सब कैसे होता है ? बताना सकते हैं ?

RATE VISUAL HALLUCINATIONS : *In clear consciousness including pseudo-hallucinations. Exclude 'dissociative' visual hallucinations (symptom 64).*

24

 (66)

- 1 = Formless visual hallucinations - flashes of light, shadows, etc.
- 2 = Formed visual hallucinations - people, objects like a 'fiery cross', faces, etc.

RATE DELIRIOUS VISUAL HALLUCINATIONS.

 (67)

14C. OTHER HALLUCINATIONS.

IF QUESTIONS HAVE NOT BEEN COVERED IN PREVIOUS SECTIONS:

** IS THERE ANYTHING UNUSUAL ABOUT THE WAY THINGS FEEL, OR TASTE, OR SMELL?

क्या चीजों की शकल, स्वाद और गन्ध में कोई अजीब सी बात लगती है, कोई फरक लगता है? *सी चीज़ों की शकल, स्वाद और गन्ध में कोई अजीब सी बात लगती है, कोई फरक लगता है?*

** DOES YOUR BODY FUNCTION NORMALLY?

क्या आपका शरीर ठीक-ठाक काम करता है या इसमें कोई फरक लगता है? *सी ठीक ठीक काम करता है या इसमें कोई फरक लगता है?*

IF NO EVIDENCE FOR OTHER HALLUCINATIONS CUT-OFF SECTION 15 A.

इसी तरह का फरक लगता है? सी ठीक ठीक काम करता है या इसमें कोई फरक लगता है?

Cut off

IF ANY EVIDENCE FOR OTHER HALLUCINATIONS.

DO YOU SOMETIMES NOTICE STRANGE SMELLS THAT OTHER PEOPLE DON'T NOTICE?

क्या आपको अजीब सी बू महसूस होती है जो औरों को नहीं होती? *सी अजीब सी बू महसूस होती है जो औरों को नहीं होती? सी ठीक ठीक काम करता है या इसमें कोई फरक लगता है?*

(What sort of things?)
(How do you explain it?)

RATE OLFACTORY HALLUCINATION: *Exclude delusion that patient himself smells.*

 (68)

- 1 = Simple olfactory hallucination. Not delusionally elaborated. Subject smells oranges, death, a burnt smell, scent, etc., which other people cannot smell. Can offer no explanation.
- 2 = Delusional elaboration in addition, e.g. gas being put into room.

DO YOU SEEM TO THINK THAT YOU YOURSELF GIVE OFF A SMELL WHICH IS NOTICED?

क्या ऐसा लगता है कि आपको अपने आप से बदबू आती है, जिसका दूसरों को भी पता चला है? *सी ऐसा लगता है कि आपको अपने आप से बदबू आती है, जिसका दूसरों को भी पता चला है? सी ठीक ठीक काम करता है या इसमें कोई फरक लगता है?*

(What is the explanation?)

RATE DELUSION THAT SUBJECT SMELLS: *Do not include simple preoccupation with body odour, e.g. in anxious subject who sweats a lot.*

 (69)

- 1 = Subject irrationally thinks he gives off a smell but is not certain. Not sure that others have noticed it but thinks it possible.
- 2 = Subject sure that he gives off a smell and that others have noticed it and react accordingly.

DO YOU EVER FEEL THAT SOMEONE IS TOUCHING YOU BUT WHEN YOU LOOK THERE IS NOBODY THERE?

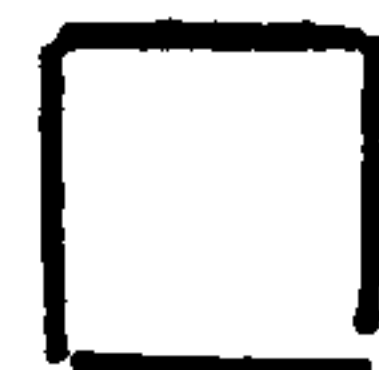
कभी ऐसे लगा जैसे किसी ने आपको छुआ हो, लेकिन पास देखने पर कोई नहीं होता? *सी ऐसे लगा जैसे किसी ने आपको छुआ हो, लेकिन पास देखने पर कोई नहीं होता? सी ठीक ठीक काम करता है या इसमें कोई फरक लगता है?*

(Have you noticed that food or drink seems to have an unusual taste recently?)

सी ठीक ठीक काम करता है या इसमें कोई फरक लगता है?

RATE OTHER HALLUCINATIONS AND DELUSIONAL

ELABORATION: *Exclude hypochondriacal and nihilistic delusions rated in (90) and (91).*



(70)

- 1=Sensation of touch, food tastes burnt, etc., but subject puzzled by the experience. No delusional elaboration.
- 2=Delusional elaboration in addition, e.g. fantasy lover, food poisoned, etc.

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15. DELUSIONS

Definition

Delusions may be of two kinds, primary and secondary. Both kinds are rated together in the following symptom except where specified. For example, primary delusions are specifically rated in symptom (82). They are defined here for convenience.

Primary delusions are based upon experiences in which a subject suddenly becomes convinced that a particular set of events has a special meaning (e.g. a subject undergoing a liver biopsy suddenly felt he had been chosen by God) This delusion cannot be explained and it is not shared by other members of the subject's cultural or social group.

Secondary delusions are delusional elaborations of primary delusions or other basic phenomena such as derealisation, depersonalisation, perceptual distortions, hallucinations, thought echo, mood changes, etc.

Above cut-off questions, likely to elicit delusions if present, are included in many of the preceding sections. There may also be evidence in the case-record or in the subject's spontaneous account.

IF NO EVIDENCE AT ALL THAT DELUSIONS ARE PRESENT, CUT-OFF → SECTION 16.

RECORD IF ANY PSYCHOTIC PHENOMENA PRESENT, OTHER THAN DELUSIONS, USE JUDGEMENT AS TO WHETHER TO PROCEED BEYOND CUT-OFF.

Cut off |

IF ANY EVIDENCE FOR DELUSIONS, ASK ALL QUESTIONS NOT IN BRACKETS, AND ANY FURTHER QUESTIONS WHICH SEEM INDICATED. RATING OF PARTIAL AND FULL DELUSIONS.

In general, all delusions are rated as follows :

1=Partial delusions, which are expressed with doubt, or as possibilities which the subject entertains but is not certain about. This rating should not be used if it is clear that full delusions have been present during the month, or if the subject has acted as if fully deluded.

2=Full delusions have been present at some time during the month. Fully convinced. No insight.

A useful question to elucidate the differences between partial and full delusions is as follows :

EVEN WHEN YOU SEEM TO BE MOST CONVINCED, DO YOU REALLY FEEL IN THE BACK OF YOUR MIND THAT IT MIGHT WELL NOT BE TRUE, THAT IT MIGHT BE IMAGINATION?

इसके बारे में चाहे आपको पूरा यकीन हो फिर भी कभी ऐसा लगता है कि शायद यह सच नहीं है या मन का वहम हो ?

दिलरे धारे वाते उजारी युका
जरीन ऊँचे डों हीनगरा
जे रि भादिर रि मर
रगी आ मर रा दामर

15A. DELUSIONS OF CONTROL

Definition

The subject's will is replaced by that of some external agency. A simple statement that the radio is controlling the subject is not sufficient. (This statement, alone, should be rated 8.) The subject must describe a replacement of will by some other force.

Do not include feeling that life is planned and directed by fate, or that the future is present already in embryo, or that subject is not very strong-willed, or that voices give subject orders. Do not include simple identification with God or being under God's direction. Do not include subcultural or hysterical possession states or multiple personality (→100.)

DO YOU FEEL UNDER THE CONTROL OF SOME FORCE OR POWER OTHER THAN YOURSELF?

क्या ऐसा मसूस होता है कि आपको किसी बाहर की ताकत या शक्ति ने अपने वश में धारगीली उतरड रे कर रखा है ?

मयहे दम रिष रीडा रे ?

(As though you were a robot or a zombie without a will of your own ?)

(As though you were possessed by someone or something else ?)

(What is that like ?)

(Does this force make your movements for you without your willing it, or use your voice, or your handwriting ? Does it replace your personality ? What is the explanation ?)

RATE DELUSIONS OF CONTROL

1=Partial delusions 2=Full delusions

(71)

15B. MISINTERPRETATIONS, MISIDENTIFICATION AND DELUSIONS OF REFERENCE

Definition

Delusions of reference: Do not include simple self-consciousness or feeling that subject attracts comment, even if critical. These are rated under symptom 31.

There must be elaboration : e. g. someone crosses his knees in order to indicate that the subject is homosexual; or the whole neighbourhood is gossiping.

Delusional misinterpretations, etc. This is an extension of the delusion of reference so that not only do people seem to refer to subject, but situations appear to be deliberately created to test him (exclude situations of medical treatment), or objects appear to have special meanings.

DO PEOPLE SEEM TO DROP HINTS ABOUT YOU OR SAY THINGS WITH A DOUBLE MEANING, OR DO THINGS IN A SPECIAL WAY SO AS TO CONVEY A MEANING?

क्या लगता है कि लोग आपकी ओर इशारा करके बातें करते हैं या ऐसे लगता है कि लोगों की बातों के दोहरे मतलब होते हैं या लोग ऐसे काम करते हैं जिनका खास मतलब होता है ?

DOES EVERYONE SEEM TO GOSSIP ABOUT YOU?

क्या ऐसे लगता है कि सभी लोग आपके बारे में बातें बनाने रहते हैं ? (Do people follow you about or check up on you or record your movements?) (How do they do it? Why?)

(Are there people about who are not what they seem to be?)

RATE DELUSIONS OF REFERENCE.

1=Partial delusions 2=Full delusions.

(72)

DO THINGS SEEM TO BE SPECIALLY ARRANGED?

क्या लगता है कि ये बातें कोई जानबूझ के कर रहा है ?

(Is an experiment going on, to test you out?)

(Do you see any reference to yourself on TV or in the papers?)

(Do you ever seem to see special meanings in advertisements, or shop windows, or in the way things are arranged?)

(How do you explain this?)

RATE DELUSIONAL MISINTERPRETATION AND MISIDENTIFICATION.

1=Partial delusions 2=Full delusions

(73)

15C DELUSIONS OF PERSECUTION

IS ANYONE DELIBERATELY TRYING TO HARM YOU, E.G.

TRYING TO POISON YOU OR KILL YOU?

क्या कोई आपको नुबसान पहुंचाने की कोशिश कर रहा है, जैसे कोई आपको जहर देने की या मार देने की कोशिश कर रहा हो ?

(How? Is there an organisation like the Mafia behind it?) (Is there any other kind of persecution? How do you explain this?)

RATE DELUSIONS OF PERSECUTION.

1=Partial delusions 2=Full delusions

(74)

15D. EXPANSIVE DELUSIONS

DO YOU THINK THAT PEOPLE ARE ORGANISING THINGS

SPECIALLY TO HELP YOU?

क्या ऐसे लगता है कि लोग आपकी मदद करने के लिये खास तौर से इंतजाम कर रहे हैं ?

RATE DELUSIONS OF ASSISTANCE.

1=Partial delusions 2=Full delusions

(75)

IS THERE ANYTHING SPECIAL ABOUT YOU? DO YOU HAVE SPECIAL ABILITIES OR POWERS?

क्या आपमें कोई खास बात है, जैसे कि आपमें कोई खास ताकत या शक्ति हो ?

(Can you read people's thoughts?)

(Is there a special purpose or mission to your life?)

(Are you especially clever or inventive? How do you explain this?)

RATE DELUSIONS OF GRANDIOSE ABILITIES.

1=Partial delusions 2=Full delusions

(76)

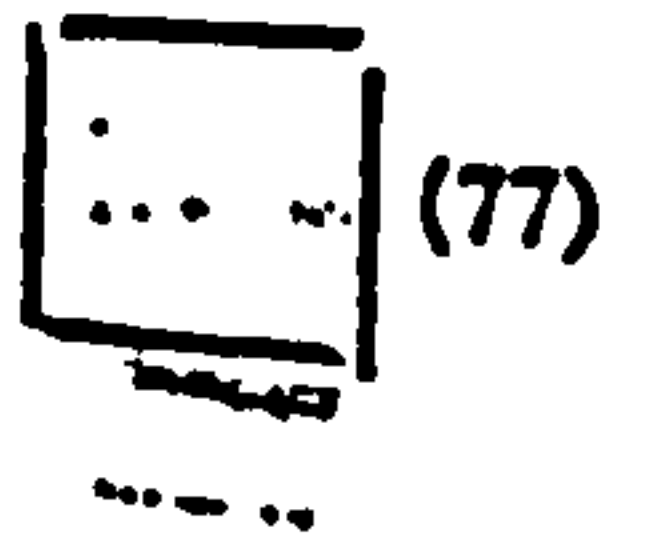
(Are you a very prominent person or related to someone prominent, like Royalty ?)

(Are you very rich or famous ?)

(How do you explain this ?)

RATE DELUSIONS OF GRANDIOSE IDENTITY: (*Exclude religious identification.*)

1=Partial delusions 2=Full delusions



15E. DELUSIONS CONCERNING VARIOUS TYPES OF INFLUENCE AND PRIMARY DELUSIONS

ARE YOU A VERY RELIGIOUS PERSON ?

क्या आप बहुत धार्मिक विचारों के हैं ? **श्री इमी परत याबर विचारों के हैं ?**

(Specially close to Christ or God ?)

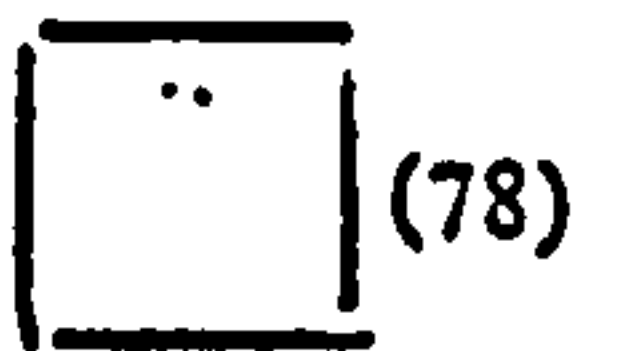
(Can God communicate with you ? How ?)

(Are you yourself a saint ?)

(How do you explain this ?)

RATE RELIGIOUS DELUSIONS : *Including delusional religious explanations of other experiences. Exclude intense religious belief or purely subcultural beliefs.*

1=Partial delusions 2=Full delusions



HOW DO YOU EXPLAIN THE THINGS THAT HAVE BEEN HAPPENING ? (SPECIFY)

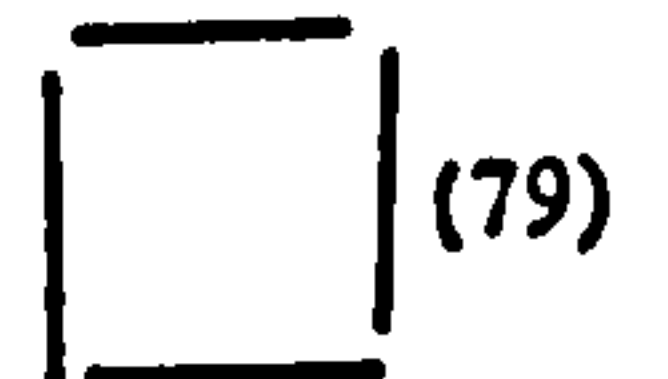
ये सब बातें जो हो रही हैं, कैसे होती हैं, बताइये ? **यह जहाँ किस उरी उरिआ रे इस सखे उ ?**

IS THERE ANYTHING LIKE HYPNOTISM, TELEPATHY, OR THE OCCULT GOING ON ? WHAT IS THE EXPLANATION ?

क्या ऐसे लगता है जैसे कि कोई जादू-टोना हो रहा हो, ओपरी कसर लगती हो या भूत-प्रेतों का असर हो, यह सब कैसे होता है ? **श्री लारा उ किहे भारू टोना**
अथरी समर लगी उहे आ उउ थुउ रा
असर उ ? कि रिहे उरिउ ?

INCLUDE DELUSIONAL EXPLANATIONS IN TERMS OF PARANORMAL PHENOMENA : *e.g. hypnotism, telepathy, magic, witchcraft, etc. Exclude purely subcultural beliefs, → 83*

1=Partial delusions 2=Full delusions



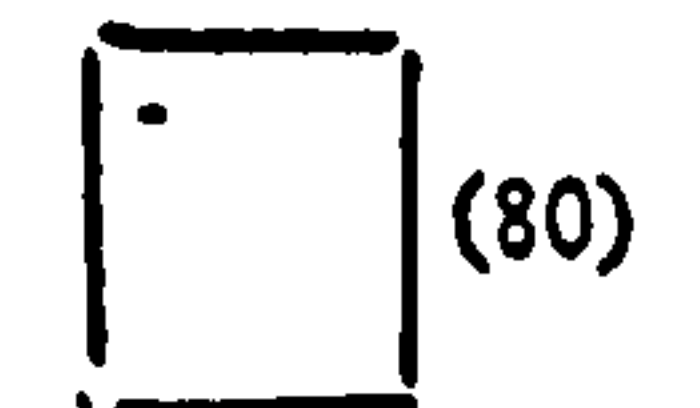
IS ANYTHING LIKE ELECTRICITY, OR RADIO-WAVES AFFECTING YOU ?

क्या ऐसे लगता है कि बिजली, एक्मरे या मशीनों का आप पर असर हो रहा है ? **श्री लारा उ रि बिजली, बिनेरस से आं मशीन**
उ रिउ उ ?

(In what way ? What is the explanation ?)

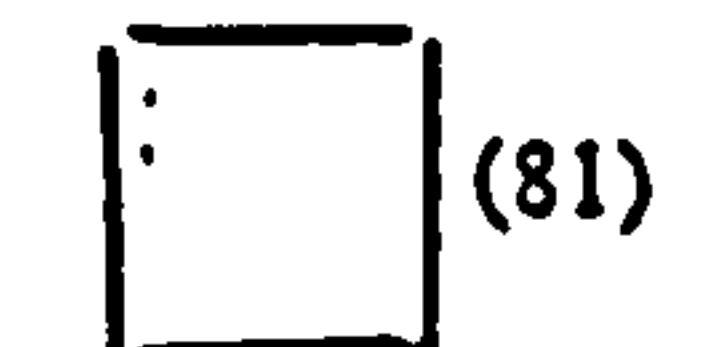
INCLUDE DELUSIONAL EXPLANATIONS IN TERMS OF PHYSICAL FORCES : *e.g. radio, television, X-rays, electricity, transmitters, microphones, machines of various kinds.*

1=Partial delusions 2=Full delusions



DELUSIONS OF ALIEN FORCES PENETRATING OR CONTROLLING MIND (OR BODY).

Include any delusion, whether rated elsewhere or not, which involves an external force penetrating the subject's mind or body, e. g. rays turn liver to gold, alien thoughts pierce skull or are inserted into mind, hypnotism makes patient levitate, a spirit speaks with subject's voice, a radio transmitter has been implanted into brain and broadcasts thoughts or controls actions, etc.



Choose a likely delusion, and ask:

HOW DID IT COME INTO YOUR MIND THAT THIS WAS THE EXPLANATION ?

आपको कैसे पता लगा कि यही कारण है? इतनी तब तक कि कि यह सब है ?

(Did it happen suddenly? How did it begin?)

RATE PRIMARY DELUSIONS: *Based upon experiences in which subject suddenly becomes convinced that a particular set of events has a special meaning. (See definition on page 26.) Not based on mood or explanation of other abnormal experiences.*

1=Partial delusions 2=Full delusions

 (82)

15F. OTHER DELUSIONS

(Examiner should question as appropriate.)

RATE SUBCULTURALLY INFLUENCED DELUSIONS: *Include only subjects who belong to small groups with definitely idiosyncratic beliefs; small sects, tribes, 'secret societies', etc.*

 (83)

0=No significant subcultural influence. For example, an English subject believing he is influenced by TV would be rated (0) since, although the delusion depends on TV being available in England, it is not in any way specific to a small subcultural group.

1=One or more of the 'delusions' rated earlier could easily be no more than a belief shared by other members of the subject's subcultural group, e.g. the Pentecostal church with the gift of tongues. Voodoo, witchcraft, communicating-with God, are other examples of beliefs which may be taken quite literally by groups of people who are not clinically deluded. Rate (1) if subject holds such beliefs without elaborating them further.

2=As (1), but because of excitement, expansiveness, depression, confusion, intellectual retardation, etc., the subject holds the beliefs with exceptional fervour and conviction, or elaborates them further. Such a subject might well be regarded as abnormal by other members of his own sect or group.

3=More specific delusional states, e.g. Koro, Witigo, etc.

(Do you have any reason to be jealous of anybody?)

MORBID JEALOUSY.

1=Partial delusions 2=Full delusions

 (84)

DELUSION OF PREGNANCY.

1=Partial delusions 2=Full delusions

 (85)

SEXUAL DELUSIONS: *Any delusion with sexual content, e. g. fantasy lover, sex changing, etc. Do not include an untrue claim that a subject is married or has children.*

1=Partial delusions 2=Full delusions

 (86)

HAVE YOU HAD ANY UNUSUAL EXPERIENCE OR ADVENTURES RECENTLY ?

इन दिनों यदि आपको कोई खास अनुभव (तजुर्बा) हुआ हो या कोई अजीब घटना (बात) हुई हो, तो बताइये ? *मे अही अगि उमूरघा जं अटहा उही उहे डां रउं ?*

RATE FANTASTIC DELUSIONS, DELUSIONAL MEMORIES, DELUSIONAL CONFABULATIONS, FANTASTIC DELUSIONS :

Confabulation : Subject makes up delusions on the spot. Very rare.

Delusional memories : Subject seems to be describing actual memories.

Describes the same delusions time and again. Not confabulations.

Rare, e.g. 'I came down to earth on a silver star.' Fantastic delusions:

The commonest of the three, e.g. England's coast melting.

1=Partial delusions 2=Full delusions

 (87)

15G. SIMPLE DELUSIONS BASED ON GUILT, DEPERSONALISATION, HYPOCHONDRIASIS, ETC.

Definition

These symptoms often appear to be based on a depressed mood and are relatively consistent and unelaborated. Do not include more bizarre elaborations of any of them, e.g. having a metal nose=symptom 87, not 89 Having been turned into another specified person=possibly symptom 71, not 90. Liver turned to lead by X-rays=symptoms 80 and 81, not 91. England's coast melting=symptom 87, not 92.

DO YOU FEEL YOU HAVE COMMITTED A CRIME, OR SINNED GREATLY, OR DESERVE PUNISHMENT ?

क्या आपको ऐसा महसूस होता है कि आपने कोई बड़ा पाप या अपराध किया है, अथवाय शीडा अ किउरे जिसके लिये आपको सजा मिलनी ही चाहिये ? *अही उगई मग्रा भिल्ली जी बाउरी अ ?*
(Have you felt that your presence might contaminate or ruin other people ?)

RATE DELUSIONS OF GUILT.

1=Subject has brought ruin to family by being in present condition, or thinks that symptoms are a punishment for not doing better, etc. Does not elaborate as in (2).

2=Subject says has sinned greatly or committed some terrible crime or brought ruin upon the world. May feel deserving of punishment, even of death or hell-fire, because of it.

(Do you think your appearance is normal ?)

RATE SIMPLE DELUSIONS CONCERNING APPEARANCE:

(Nose too large, teeth misshapen, body crooked, etc.)

1=Strong feelings that there is something wrong with appearance ; subject looks old or ugly or dead, skin cracked, teeth misshapen, nose too large, body crooked, etc. Can be reassured temporarily. There may be only one limited preoccupation.

1=Subject acts accordingly (plastic operations, etc.)

(Is anything the matter with your brain ?)

RATE DELUSIONS OF DEPERSONALISATION : *Subject has no head, does not exist, hollow instead of a brain, etc.*

1=Unable to think, no thoughts in head, feels as though he has no brain or as though it does not function at all.

2=Symptom more intense. Subject has no head, no brain, does not exist.

 (88)

 (89)

 (90)

(Is anything the matter with your body?)

RATE HYPOCHONDRIACAL DELUSIONS: *Subject has incurable cancer, bowels are stopped up, insides are rotting, etc.*

(91)

1=Subject feels body is unhealthy, rotten, diseased, but without the force of (2).

2=Subject has incurable cancer, bowels are stopped up or rotting away, etc.

(Do you have the feeling that something terrible is going to happen? What?)

RATE DELUSIONS OF CATASTROPHE: *World is about to end, some catastrophe has happened or will occur, everything is evil and will be destroyed.*

(92)

1=Subject feels sense of impending doom; something awful will happen.

Non-specific but out of proportion to circumstances.

2=Delusional conviction that world is about to end or some other enormous catastrophe is about to occur or has occurred. World is dirty, decayed, rotten: i.e. further delusional elaboration of (1).

15H. GENERAL RATINGS OF DELUSIONS AND HALLUCINATIONS.

(Include both partial and full delusions.)

CONSIDER BOTH DELUSIONS AND HALLUCINATIONS IN FOLLOWING RATINGS

RATE SYSTEMATISATION OF DELUSIONS.

(93)

Scoring:

0=No delusions or hallucinations.

1=Delusions and hallucinations not elaborated into a general system affecting much of the subject's experience. Include encapsulated delusions or isolated hallucinations.

2=Some systematic elaboration, but substantial areas of the subject's experiences are not affected.

3=Subject interprets practically all his experience in delusional terms.

RATE EVASIVENESS.

(94)

Scoring:

0=No attempt at concealment suspected.

1=Examiner suspects that there may be (either) delusions or hallucinations in the background, but the subject is not concealing much of the psychopathology.

2=Examiner suspects that there is a considerable preoccupation with delusions (even a delusional system) or hallucinations, but the subject tries to conceal them.

3=No concealment but other delusions or hallucinations probably present. Not elicited because of poor intelligence and education or incoherence or muteness, etc.

OVERALL RATING OF PREOCCUPATION WITH DELUSIONS AND HALLUCINATIONS.

(95)

Scoring :

- 0=No delusions or hallucinations.
- 1=No delusions or hallucinations definitely rated but examiner suspects that they may be present.
- 2=Preoccupied with past delusions or hallucinations only. Not actively deluded or hallucinated at present.
- 3=Delusions or hallucinations definitely present but subject is not preoccupied with them for much of the time. Can turn attention to other things without difficulty.
- 4=Delusions or hallucinations present and take up most of the subject's attention. Preoccupied to the exclusion of many other matters.
- 5=Patient can hardly discuss anything but delusions.

RATE ACTING OUT DELUSIONS

(Rate from case-record, etc.)

(96)

Scoring :

- 0=No delusions or hallucinations.
- 1=Subject able to keep delusions or hallucinations to himself, or to confide them only to a few trusted people (sympathetic relatives, friends, doctors, etc.). He does not express them in public nor act upon them. Does not talk out loud to voices.
- 2=Subject has acted upon delusions or hallucinations during past month, or expressed them in public (i.e. outside the small circle of people who would be expected to be sympathetic). This has not however resulted in severe social disturbance or a social crisis.
- 3=As (2) but acting out, or public expression, has resulted in severe social disturbances or a social crisis.

16. SENSORIUM AND FACTORS AFFECTING

** HAVE YOU HAD ANY LAPSES OF MEMORY RECENTLY ?

इन दिनों याददाश्त में कमी (कमजोरी) महसूस हुई ? **आज रातु टिच रही थी उठी ?**

(Have there been any periods in which you completely forgot what happened ?)

(What was it like ?)

(How do you explain it ?)

RATE FUGUES, BLACKOUTS, AMNESIA LASTING MORE THAN ONE HOUR : *irrespective of aetiology.*

(97)

1=less than 12 hours.

2=12-24 hours.

3=more than 24 hours.

** WHAT MEDICINES OR DRUGS DO YOU TAKE ?

आजकल आप कौन सी दवाईयां ले रहे हैं ? **आजकल, रिगड़ी दवाई ले रहे हैं ?**

(Do you take anything for your nerves or your mood ?)

(Obtain list of drugs.)

(Who prescribes ?)

RATE DRUG ABUSE DURING MONTH. One category only.

1=Cannabis.

2=Amytal, etc.

3=LSD, amphetamine, etc.

4=Cocaine, heroine, etc.

(98)

**** MAY I ASK ABOUT YOUR DRINKING HABITS ? HOW MUCH DO YOU USUALLY DRINK EACH DAY?**

क्या आप शराब पीते हैं ? औसतन एक दिन में कितनी पी लेते हैं ? *श्री मराठ घीटे उ ? औमडरि*
(Is alcohol in any way is problem for you? In what way?) *दिव रिती ?*

(CHECK LIST: Present on card if needed. During the past month have you :

had family problems because of drinking ?

missed work because of drinking ?

had morning shakes or other withdrawal symptoms ?

had blackouts for several hours ?

heard voices or seen visions ?)

RATE ALCOHOL ABUSE DURING PAST MONTH.

1=Agrees alcohol has been a problem but not 2.

2=Any check-list item applies.

(99)

RATE DISSOCIATIVE STATES DURING PAST MONTH :

'Narrowing of consciousness which serves an unconscious purpose and is commonly accompanied or followed by a selective amnesia',

e.g. trance, possession state, fugue, hypersomnia, stupor, etc.

Do not include if caused by drugs, alcohol, epilepsy, etc.

1=Present during the past month, but not at examination.

2=Present at examination.

(100)

RATE CONVERSION SYMPTOMS, e.g. paralysis, anaesthesia, blindness, tremor, seizures, etc. if mentioned during interview.

1=Present during month, not at examination.

2=Present at examination.

(101)

RATE CLOUDING OR STUPOR AT EXAMINATION

1=Clouding: Inadequate comprehension of external impressions, with perplexity, and impairment of attention and orientation.

2=Stupor: Subject appears comatose but there is no clouding or impairment of consciousness.

(102)

IF ANY SUSPICION OF POOR MEMORY OR DISORIENTATION :

MAY I ASK ONE OR TWO STANDARD QUESTIONS WE ASK OF EVERYBODY ? *श्री मे रिट श्री महात्त रिट निचे थुह मरहा जं श्री अमी*

क्या मैं एक दो ऐसे सवाल पूछ सकता हूँ जो कि हम हरेक से पूछते हैं ? *उठ रिती उ थुह मरहे जं ?*

HOW OLD ARE YOU ?

आपकी उम्र कितनी है ? *रिती उमर उ उगडी ?*

CAN YOU TELL ME THE YEAR AND THE MONTH ?

क्या आप बता सकते हैं कि आजकल महीना कौन सा चल रहा है और कौन सा साल ? *श्री एम मरहे उ रि रिगडा*

WHAT IS THE NAME OF THE PRIME MINISTER ?

हमारे प्रधान मंत्री का क्या नाम है ? *श्री एम मरहे उ रि रिगडा*

RATE ORGANIC IMPAIRMENT OF MEMORY. See glossary for definition.

- 1=Mild.
2=Moderate.
3=Severe.

(103)

17. INSIGHT

** DO YOU THINK THERE IS ANYTHING THE MATTER WITH YOU ?

क्या लगता है कि आपको कोई बीमारी है या आपमें कोई त्रुटि है ? **जी हाँ** **क्या कारण है कि आपने आँसू डी**
(What do you think it is ?) **घमाती है कि त्रुटि है ?**

(Could it be a nervous condition?)

(What do you think the cause is ?)

(Why did you need to come to hospital ?)

(Do you think (*specify delusions or hallucinations*) were part of a nervous condition ?)

IF PSYCHOTIC SYMPTOMS (i.e. SYMPTOMS FROM SECTIONS 12-15):

(104)

- 0=Full insight (intelligent subject, able to appreciate the issues involved).
1=As much insight into the nature of the condition as social background and intelligence allow.
2=Agrees to a nervous condition but examiner feels that subject does not really accept the explanation in terms of a nervous illness (e.g. gives delusional explanation, the result of persecution, or rays, etc.).
3=Denies nervous condition entirely.
9=Psychotic illness not present.

IF NEUROTIC SYMPTOMS (i.e. SYMPTOMS FROM SECTIONS 1-11 ONLY):

(105)

- 0=Full insight (in intelligent subject able to appreciate the issues involved).
1=As much insight into the nature of the condition as social background and intelligence allow.
2=Gives physical explanation for neurotic symptoms.
3=Denies neurotic symptoms entirely.
9=Neurotic illness not present.

** OF ALL THE PROBLEMS YOU HAVE TOLD ME ABOUT, WHICH ONE AFFECTS YOU MOST ?

जो भी समस्याएँ आपने मुझे बताई हैं, उनमें से सबसे ज्यादा तकलीफ आपको किस से है ? **मेरे अकेलेपन, त्रुटि, शर्मिंदगी, जो त्रुटि है 'अपने'**
HOW MUCH DOES IT INTERFERE WITH YOUR WORK OR YOUR RELATIONSHIPS WITH OTHER PEOPLE ? **जिम्हारा उरलीक रिश्तेदार, है ?**

इन बातों का आपके कामकाज पर कितना असर पड़ा है ? आपका दूसरों के साथ मेल **टिप्पणी जॉर्ज रा इगडे**
जोल क्या कम हो गया है ? **रिश्तों में त्रुटि है ? रिश्तों में त्रुटि है ?**

(Have you actually been out of work, or been unable to do the housework or **घर में काम ?**
go shopping, travelling, etc., during the past month ?)

(Have the symptoms impaired your efficiency in any other way ?)

RATE SOCIAL IMPAIRMENT DUE TO NEUROTIC CONDITION.

(106)

- 0=No neurotic or psychotic symptoms present.
1=Neurotic symptoms present but little diminution of subject's efficiency or interference with everyday activities.

2=Neurotic symptoms interfere with subject's efficiency to moderate extent but are not incapacitating, e.g. subject neglects housework or can't enjoy leisure activities or social relationships, or finds work-efficiency reduced because of worry, tension, irritability, depression, anxiety, etc. Subject does not, however, stop work altogether or completely neglect household.

3=Subject severely incapacitated by neurotic symptoms: had to have at least a week off work during past month; was housebound for a week or more; was actively withdrawn from all social relationships, etc. The subject does not have to be totally incapacitated for the whole month for this rating to be made, but impairment has to be very severe.

8=Examiner unsure.

9=Psychotic condition present.

(If both psychotic and neurotic condition, rate whichever shows more impairment.)

RATE SOCIAL IMPAIRMENT DUE TO PSYCHOTIC CONDITION

(107)

0=No neurotic or psychotic symptoms present.

1=Psychotic symptoms present but little diminution of subject's efficiency or interference with everyday activities.

2=Psychotic symptoms interfere with subject's efficiency to a moderate extent but are not incapacitating, e.g. subject neglects housework or can't enjoy leisure activities or social relationships, or finds work-efficiency reduced. Subject does not, however, stop work altogether or completely neglect household.

3=Subject severely incapacitated by psychotic symptoms: had to have at least a week off work during past month; was housebound for a week or more; was actively withdrawn from all social relationships, etc. The subject does not have to be totally incapacitated for the whole month for this rating to be made, but impairment has to be very severe.

8=Examiner unsure.

9=Neurotic condition, and no psychotic condition, present.

FINAL QUESTION

** HAVE THERE BEEN ANY OTHER THINGS LATELY THAT I HAVEN'T COVERED?

क्या इन दिनों आपको और भी तकलीफ रही है जिसके बारे में मैंने आपसे अभी तक कुछ नहीं पूछा ?

Specify :

दिव में कुछ सी थोड़ा ?

Note here any points that seem to be important or unusual about the subject or the interview which are not covered in the schedule.

Reconsider schedule to make sure that all obligatory questions have been asked. Also consider whether behaviour, affect and speech ratings can be made or whether further observation or examination is necessary. IF NOT, THIS IS THE END OF THE INTERVIEW.

18-20. BEHAVIOUR, AFFECT AND SPEECH

RATINGS

0=Symptom absent.

1=Present in fairly severe degree, or very severe but intermittent during interview.

2=Present in very severe degree and almost continuous during interview.

8=Examiner not sure.

9=Subject not examined, or examination not appropriate.

N.B. If in doubt, rate (0). A rating of (1) means there is no doubt about the symptom being present in fairly severe form.

Behaviour during interview

Self-neglect (cleanliness, shaven, make-up, state of hair and clothes).

 (108)

Bizarre appearance (secret documents openly displayed, special clothes or ornaments with symbolic significance, etc. Do not include mannerism or posturing = symptom 116).

 (109)

Slowness and underactivity (sits abnormally still, walks abnormally slowly, delay in performing movements).

 (110)

Agitation (fidgety, restlessness, pacing, frequent unnecessary movements).

 (111)

Gross excitement and violence (throws things, runs or jumps about, waves arms wildly, shouts or screams).

 (112)

Irreverent behaviour (sings, facetious, silly jokes, flippant remarks, unduly familiar).

 (113)

Distractibility (stops talking or changes subject due to distraction by trivial noises or events outside the room or turns attention to furniture, etc.).

 (114)

Embarrassing behaviour (making sexual suggestions or advances to interviewer; loss of social restraint—scratches genitals, passes loud flatus, etc.).

 (115)

Mannerisms and posturing (odd, stylised movements or acts, usually idiosyncratic to the patient, often suggestive of special meaning or purpose: assuming and maintaining uncomfortable or inappropriate postures).

 (116)

Stereotypies, etc. (constant repetition of movements or postures such as rocking, rubbing, nodding, grimacing: no special significance).

 (117)

Behaves as if hallucinated (non-verbal: as though hears voices or visions: lips move soundlessly, looks round, giggles to self—not just from embarrassment, shyness, etc.).

 (118)

Catatonic movements

(Negativism: does the opposite of what he is asked.

Ambitendence: begins to take proffered hand, then withdraws; etc.

Echopraxia: imitates examiner's movement.

Flexibilitas cerea: arm remains where it is put, for at least 15 seconds.

Mitgehen: excessive co-operation in passive movements.

Echolalia: imitates words and phrases with same intonation and inflection of voice.)

(These items can be separately rated in special projects.)

 (119)
Affect during interview

Observed anxiety (tense worried look or posture, fearful apprehensive look, frightened tone of voice, tremor).

 (120)

Observed depression (sad, mournful look, tears, gloomy tone of voice, deep sighing, voice chokes on distressing topic).

 (121)

Histrionic (feelings expressed in exaggerated, dramatic, histrionic manner).

 (122)

Hypomanic affect (unduly cheerful, smiling, euphoric, elated).

 (123)

Hostile irritability (unco-operative, irritable, angry, overtly hostile, discontented, haughty, antagonistic).

 (124)

Suspicion.

 (125)

Perplexity (puzzlement).

 (126)

Lability of mood (whether lability of one mood, or changing from one mood to another).

 (127)

Blunted affect (expressionless face and voice, uniform blunting whatever the topic of conversation, indifference to distressing topics, whether delusional or normal).

 (128)

1—Blunting not uniform, e.g. at times responds affectively but at other times is markedly flat; or responds with some evidence of affect, but definitely less than expected.

2—Severe and uniform blunting.

Incongruity of affect (emotion is shown, but not congruent with topic).

 (129)
Speech during interview

Slow speech (long pauses before answering, long pauses between words).

 (130)

Pressure of speech (more copious speech than normal, too rapid speech, very loud voice, too circumstantial speech).

 (131)

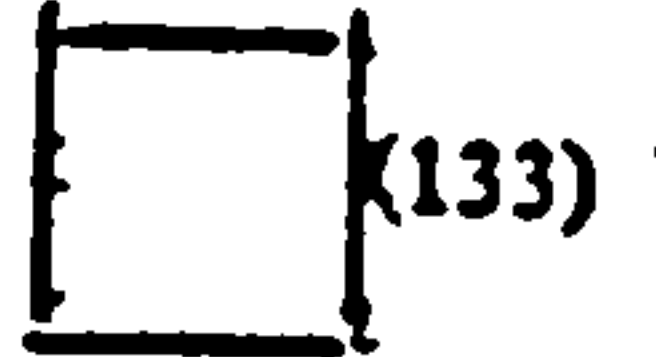
Non-social speech (talks, mutters, whispers out loud, out of context of conversation with examiner).

 (132)

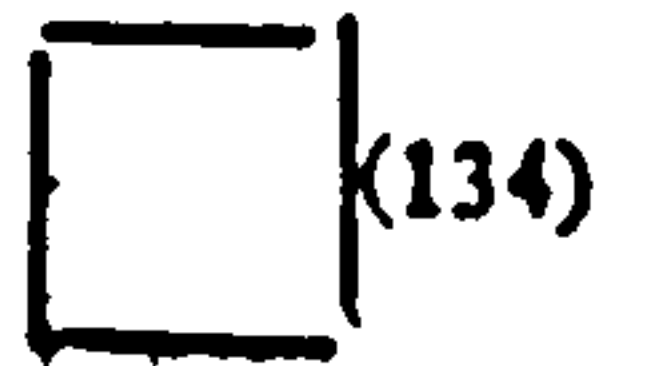
Muteness

1=Almost mute, fewer than twenty words in aH.

2=Totally mute.

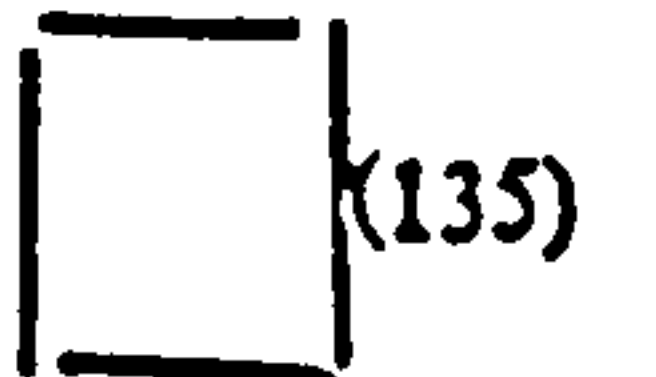


Restricted quantity of speech (subject frequently fails to answer, questions have to be repeated, restricted to minimum necessary, no extra sentences, no additional comments).



Neologisms and idiosyncratic use of words or phrases, e. g. One is called "Per-God" and the other is called "Per-the-devil",

'...miracle-willed through God's "tarn-harn"...', 'Well, there is a frequenting of clairvoyance...': 'per-the-Devil' and 'tarn-harn' are neologisms; 'frequenting of clairvoyance' is an example of ordinary words used idiosyncratically. **DO NOT RATE THIS SYMPTOM PRESENT UNLESS EXAMPLES ARE WRITTEN DOWN.**

**Disorder of content of speech**

Three types of disordered content are specified: in each case, the effect is to make it very difficult to grasp what the subject means. However, the symptoms are defined in terms of specific components so that it should, in most cases, be possible to say whether one, two or all three symptoms are present. If in doubt, rate hierarchically, i.e. rate incoherence in preference to flight of ideas in preference to poverty of speech.

If the patient does not talk enough to give a rateable sample of speech, rate all three symptoms Y.

Incoherence of speech. The subject's meaning is obscured by distorted grammar, lack of logical connection between one part of a sentence and another or between sentences, sudden irrelevances or 'Knight's move', grossly pedantic phrases, answering of the point, etc. For example:

'We've seen the downfall of the radium crown by the Roman Catholics, whereas when you come to see the drinking side of the business, God saw that Noah, if he lost his reason, he got nobody there to look after them.'

'I did suggest to you, that intrinsic or congenital sentiment or refinement of disposition would be so miracle-willed through God's "tarn-harn" to assume quite the opposite.'

'I believe we live in a world, in an age, where the elements are a force that elders of professionalism hope, not to conquer, but to control.'

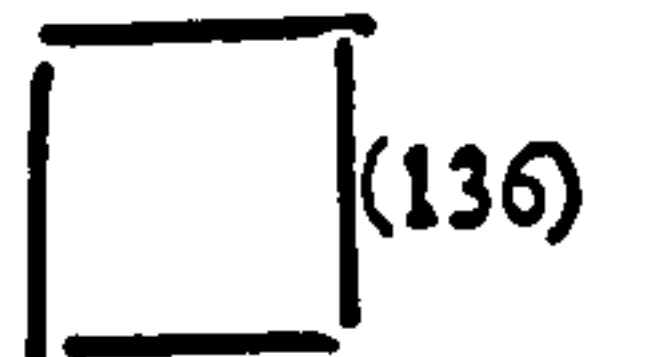
'What's your address?' 'It's supposed to be Salisbury near Birmingham.'

(Vorbeireden.)

DO NOT RATE THIS SYMPTOM PRESENT UNLESS EXAMPLES ARE WRITTEN DOWN.

A rating of 2 means that very little normal speech is present.

N.B. A free flow of delusions is not necessarily incoherent. A subject may talk about delusions quite coherently.



Flight of Ideas. Words are associated together inappropriately by sound or rhyme (clang association). Although the original aim of the sentence may quickly be lost, a path can be traced through associations of the white-black-coffin or ring-wrong variety, or through associations with distracting stimuli, e.g.

 (137)

'How is your appetite?' 'I feel as if I have lost my appetite. I have had an orange. A real juicy orange.' (Sees patient walking past window.) 'She is going for E.C.T. Etcetera treatment or teddy bear's picnic. I call it.'

DO NOT RATE THIS SYMPTOM PRESENT UNLESS EXAMPLES ARE WRITTEN DOWN.

A rating of 2 means that very little normal speech is present.

Poverty of content of speech. The subject talks freely but so vaguely that little information is given in spite of the number of words used: rambles on without coming to a point; may wander far from original theme. Exclude incoherence or flight of ideas: Rate only if severe and always give written example.

 (138)

Misleading answers. Subject's answers are misleading because answers 'yes' or 'no' to everything, or frequent self-contradictions, or appears to be deliberately misleading. Do not include incoherence, flight of ideas or poverty of speech here.

 (139)

Re-rate adequacy of interview

0= Ratings made adequately represent the symptoms present.

1= Some problem but key symptoms have been rated.

2= Serious question as to adequacy of interview for rating key symptoms (other than sections 18-20).

3= Only sections 18-20 could be rated.

 (140)

Check that every box has an entry except those below ticked cut-off points:

Complete coding sheet if one is being used.

APPENDIX 4

PPHS HINDI / PUNJABI

सामग्रि और व्यक्तिगत इतिहास संकल्प

संस्था का नाम

रोगी का नाम

रोगी का चिन्ह नम्बर

वारिकले की तारीख

संज्ञान

हाँ: १

नहीं: २

किस तरह का संज्ञान ?

४ = १

२ = २

३ = ३

५ = ४

३६ = ५

३७ = ६

संज्ञान / प्रीलिम्ब नम्बर

रोगी नम्बर

सूचनादाता चिन्ह नम्बर

नम्बर

संज्ञान नम्बर

मनीषिचित्सक लिखने यह सूचना ली

नाम (खाली दौड़ दीलिये)

WHO Collaborative study on
Determinants of Outcome
Severe Mental Disorder

PSYCHIATRIC AND PERSONAL HISTORY SCHEDULE

Name of facility _____

Patient's first name or initials _____

Identification number of patient
in the facility _____

Date of admission

--	--	--	--	--	--

Section

Y = 1
No = 0

--

Type of Section

4 = 1
2 = 2
3 = 3
5 = 4
36 = 5
37 = 7

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Centre/Project No.

Subject/Patient No.

Respond. Type No.

Ethnicity ID No.

Schedule No.

		1, 2
		3, 4, 5
		6
		7, 8
0	5	9, 10

Card 1

Cols.

Psychiatrist who made this assessment

Name (leave blank) _____

			11, 12, 13
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क्या यह स्मृत्यूल प्रामाणिक है लिखे लिखा गया ?

0 = नहीं

1 = हाँ। भरने वाले ने शीगी का इन्टरव्यू लिखा।

2 = हाँ। भरने वाला इन्टरव्यू में उपस्थित था परन्तु इन्टरव्यू नहीं लिखा।

मनीषाफिल्सक जिसने
शीगी का इन्टरव्यू लिखा
नाम

शीगी का डब्ल्यू.एच.डी. नं.:

लिखित अब प्राप्त करा गया

शीगी का लिंग पुरुष = 1 स्त्री = 2

शीगी की उम्र

सूचना के स्त्रीत लिखना उपयोग लिखा गया

0 = नहीं

1 = हाँ

2 = प्रतिकूल

शीगी के साथ इन्टरव्यू

सूचना दाता के साथ इन्टरव्यू

असल जयादा सूचनादाता के

साथ इन्टरव्यू

Was this schedule filled in as part of a reliability interview?

14

- 0 = No
- 1 = Yes, the person who filled in this schedule also interviewed the patient
- 2 = Yes, the person who filled in this schedule was present during the interview but did not interview the patient himself

Psychiatrist who interviewed the patient

15, 16, 17

Name (leave blank) _____

Patient's WHO number

18, 19, 20

Date when this form was filled in

21, 22, 23, 24, 25, 26

Sex of patient

27

- 1 = Male
- 2 = Female

Age of patient

28, 29

Sources of information to fill in this form

- 0 = No
- 1 = Yes
- 8 = Not applicable

Interview with the patient

30

Interview with a key informant

31

Interview with more than one informant

32

पिछली भर्ती या वर्तमान भर्ती के बैकनीट

और लिखित भाग

और स्त्रोत

यदि सूचना दाता के साथ स्त्रोत हुआ तो

शेगी के साथ क्या रिश्तेशारी थी ?

0 = माता

1 = पिता

2 = पति। पत्नी

3 = दूसरे घर वाले

4 = मित्र। सखी

5 = और कोई पूरा लिखिये

8 = प्रतिबुल

पता (यदि शेगी से अलग रहते हैं)

यदि कोई दूसरे सूचनादाता से वाली हुई तो विशिष्ट करें:

शेगी के साथ रिश्ता

लीब्रता कितनी ?

पिछले तीन महीने के

0 = कम या नहीं

1 = मध्यम

2 = अधिक

Case notes from previous or current admission 33

Other written documents (specify _____) 34

Other sources (specify _____) 35

If a key informant was interviewed, specify:
(Note:- a key informant is a person who has been in daily or almost daily face-to-face contact with the patient)

Relationship to patient 36

- 0 = Mother
- 1 = Father
- 2 = Spouse
- 3 = Other person living in the same household as patient
- 4 = Friend
- 5 = Other (specify _____)

8 = not applicable, no key informant available

Address (if different from patient's) _____

If other informants (not qualifying as key informants) were interviewed, specify:

Relationship to patient

Intensity of contact with patient in last three months
0 = low 1 = medium 2 = high or none

1.
2.
3.
4.
5.

स्थान जहाँ इन्टरव्यू लिया गया।

0 = क्लिनिक या हस्पताल

1 = रोगी या सूचनादाता का घर

2 = और जगह (विशिष्ट करें)

8 = प्रोत्सूल

इन्टरव्यू का परिचय

श्री: मैं काम करता/करती हूँ। हम मानसिक स्वास्थ्य में एक वैज्ञानिक अनुसंधान कर रहे हैं। यदि मरीज़ों की उत्तम सेवा प्रदान कर सकें। मैं आपसे अपनी। के स्वास्थ्य में कौन से कुछ प्रश्न करना चाहूँगा। चाहूँगी। पिछले हालचाल और परिवार से भी यह प्रश्न सम्बन्धित हैं। मैं यह दोहराना चाहूँगा/चाहूँगी कि यह वैज्ञानिक अनुसंधान है और जो कुछ आप कहेंगे वह गोपनीय है और किसी भी अधिकारक प्रमाण का हिस्सा नहीं होगा।

साक्षात्कर्ता स्वयं की क्षमताएँ और कि यह परिचय पूरी तरह समझा गया है और सभी आज्ञा ले कर जारी करें।

इन्टरव्यू के हर इन्कार का कारण नीचे लिखा जाए:

रोगी या सूचनादाता के इन्कार का कारण:

Locality where main interview with informants/patient took place:

37

- 0 = At research or hospital facility
- 1 = Patient's or informant's home
- 2 = Other (specify _____)
- 8 = Not applicable

INTRODUCTION TO INTERVIEW

The investigator should first introduce himself/herself and thank the informant (or patient) agreeing to see the interviewer. The purpose of the interview should be explained briefly in approximately the following terms:-

"I work for... (Name of Institution or facility). We are now carrying out a scientific investigation about mental health problems with the aim of learning how to provide better medical care to people. I want to ask you a number of questions about your/X's health, about your/his/her past life, and about the family in general. I want to repeat that this is a scientific investigation and to assure you that everything you tell us about your/X will be treated confidentially and will not appear on any official records".

The investigator should satisfy himself that the informant (or patient) has understood these introductory words, and asked for the subject's explicit consent to proceed with the interview.

In every case of refusal of the interview, a note should be entered in the space provided below:

REASONS FOR INFORMANT'S (OR PATIENT'S) REFUSAL OF INTERVIEW

मानसिक रोग सम्बन्धी इतिहास

हस्पताल या दस संस्था में रोगी को इतने का क्या कारण था? अब क्यों? क्या लिप्टी यही कारण था? कितना गम्भीर था? सबसे महत्वपूर्ण क्या कारण था? और और कारण? व्यवहार का वर्णन पूरी तरह लेने की कोशिश करें...

दस दारिले या हाजिरी के सुचनादाता द्वारा दिए गये कारण वर्णन करें: (जितनी जरूरी हों उतने भरिए)

0 = नहीं 1 = हाँ 8 = प्रतिकूल या और सुचना नहीं
9 = अनिश्चित

- 1.1.1. रोगी ने आत्महत्या या स्वयं को हानि पहुंचाने की चेष्टा की
- 1.1.2. रोगी का व्यवहार सम्भावित खतरा बन सकता है विशेषतया अपने स्वाम्य पर (उदाहरण आत्महत्या की बातें, खाना न खाना अर्थात्)
- 1.1.3. रोगी ने किसी पर आक्रमण किया या और हिंसात्मक काम (उदाहरण आग लगाई या जानमाल को नुकसान पहुंचाया)
- 1.1.4. दूसरों के विचार में रोगी का व्यवहार बहुत धमकीपूर्ण या लंग करने वाला
- 1.1.5. असंगत या विचित्र व्यवहार की शुरुआत या अर्धितरी (जिसमें बातचीत, शारीरिक भी शामिल हैं) (उदाहरण उल्टना/ या अलगाव, अपनी देखभाल न करना, अपनाप शनाप बोलना, विचित्र विचार, किसी बात में दिल न लगाना, काम आज ही देना धूमना, अधिक धिन्ता या उर)
- 1.1.6. रोगी को शारीरिक रोग या चीट के लक्षण हुए

PART 1. PSYCHIATRIC HISTORY

Card 1

"What, if anything, happened to make it necessary for X to come (to be brought to...) (Specify the hospital, clinic or other facility) at this particular time?" Cross-examine: "Was that the only reason?" "How serious was that?" "Which was the most important reason?" "Was there anything else?" Try to obtain a description of behaviour or of an event if such has occurred. (The mode or agency of referral is not rated here but in item 1.6)

1.1 RATE MAIN REASONS FOR CURRENT ADMISSION OR ATTENDANCE ACCORDING TO INFORMANT (rate as many as applicable).

0 = No
 1 = Yes
 8 = Not applicable or no information
 9 = Uncertain

- | | | | |
|-------|---|--------------------------|----|
| 1.1.1 | Patient <u>attempted</u> suicide or bodily harm | <input type="checkbox"/> | 38 |
| 1.1.2 | Patient's behaviour perceived as <u>potential</u> danger to himself (e.g. talked of killing or harming himself; refusal of food, etc). | <input type="checkbox"/> | 39 |
| 1.1.3 | Patient <u>committed</u> an assault, or other violent or hazardous act (e.g. setting fire or destroying property) | <input type="checkbox"/> | 40 |
| 1.1.4 | Patient's behaviour perceived by others as <u>threatening</u> or grossly annoying | <input type="checkbox"/> | 41 |
| 1.1.5 | <u>Onset or exacerbation</u> of odd behaviour, appearance or talk (e.g. excitement or withdrawal, self-neglect, incoherent talk, bizarre ideas, loss of interest or abandoning work, wandering, marked anxiety or fears, etc) | <input type="checkbox"/> | 42 |
| 1.1.6 | Patient developed signs of <u>physical illness</u> or sustained an <u>injury</u> | <input type="checkbox"/> | 43 |

- 1.1.7 घर या परिवार में नवीन संघर्ष या परिवर्तन जिसके कारण रोगी पर असर पड़ा है (उदाहरण परिवार के सदस्य की बीमारी, घर बदलना, बच्चे का जन्म, घर के सदस्य की मृत्यु, शायी और ह)
- 1.1.8 डॉक्टर या स्वास्थ्य-प्रदाता के द्वारा भरोसा की रोजा गया था किसी और संस्था के द्वारा रोजा गया
- 1.1.9 रोगी ने स्वयं दारिद्र्य के लिए या सलाह के लिए कहा (या किसी और के कहने या शिक्षा पर कहा गया)
- 1.1.10 और कारण (विनिर्दिष्ट करें)

1.2 आपने बताया है कि आप / आपका इस समय किस कारण वश थकें आते हैं। मैं अब बुलबुल में (विशेषकर पिछले एक साल में) जो कुछ हुआ उसके बारे में जानना चाहूँगा। चाहूँगी। सबसे पहली बार आपके दिल में कब यह बात आई कि रोगी का व्यवहार बदल गया था और वह अपने आप भी यह व्यवहार नहीं कर रहा था? और रोगी ने क्या उसी समय या उससे भी पहले यह परिवर्तन भीट किया था?

सूचनादाता को सूचना के आ समय दीजिए और फिर प्रश्न करें: क्या उससे पहले कोई परिवर्तन नहीं था? उसके बाद? उस घटना से पहले या बाद में? (किसी घटना से लीडकर समय का पता करें)। पहली घटना का वर्णन लिखें।

1.2 सूचना दाता या दूसरों द्वारा सबसे पहली की अनुमानित शुरुआत जब रोगी का व्यवहार बदलने लगा

1.3 इन घटनाओं की शुरुआत का समय (कितने महीने पहले?)

- 1.1.7 Recent change of crisis in family or household necessitating contact without change of patient's condition (e.g. illness of a household member, rehousing, birth of a child, death of a household member, somebody getting married, etc) 44
- 1.1.8 Patient was referred for a routine checkup by a doctor or other health worker, or by an agency (e.g. school, driving licence authorities, etc) 45
- 1.1.9 Patient himself has requested admission or an appointment to see a doctor or other health worker because of complaints about his mental health (other than problems listed above) 46
- 1.1.10 Other reason (specify _____) 47

1.2 "You have already told me about the reason why X had to come to/hospital, clinic, etc. - as relevant/ at this point in time, and about the kind of problems he has now. I should like now to ask you about things which happened in the past, mainly in the last year and maybe even earlier. What was it that made you aware for the first time ever that X was not behaving like his usual self? Did other people notice anything unusual about X's behaviour around that time; or maybe even earlier that you did?

Allow for informant to think and reply, then cross examine: "Was there nothing of the sort before that? Did that happen before or after.../use as a reference point in time a fact that the informant has already mentioned, or an event which should be locally known/ ?" Write down a narrative note, in informant's own words, on first ever abnormality that he recollects, and its approximate timing:

1.2 PROBABLE EARLIEST MANIFESTATION OF PATIENT'S ABNORMALITY PERCEIVED BY INFORMANT OR OTHERS

----- 48, 49, 50

1.3 TIMING OF ABOVE EVENTS APPROXIMATE NUMBER OF MONTHS AGO (999 if unknown)

51, 52, 53

- 1.4 (7) आत्महत्या या अपने आप को नुस्खान पहुँचाने की कोशिश ?
- 1.4 (8) माल को नुस्खान पहुँचाना उदाहरण आग लगा देना ?
- 1.4 (9) बिना कारण के देश के किसी दूसरे हिस्से में जायज हो जाना ?
- 1.4 (10) मन्दिर या गिरजे में घन्टी बिल्ला देना हालाँकि पहले वहाँ जाने का कोई शीर्षक न था ?
- 1.4 (11) बिना बजट कई दिन गुस्सिल और भगडालू व्यवहार करना ?
- 1.4 (12) और जिम्मेवारी से बिना बजट जयादा पैसा खर्चना जो उसके पहले वाले व्यवहार से अलग है ?
- 1.4 (13) और जिम्मेवार, उदाहरण, दुःखप्रद या अश्लील व्यवहार किया जिससे कई लोगों को दुःख पहुँचा ?
- 1.4 (14) ऊल जलूल या अनाप शनाप बातें करना जो कोई भी न समझ सके कि वेगी क्या कहना चाह रहा है ?
- 1.4 (15) शक से जयादा कीड़े पर ऐसा व्यवहार किया जैसे कि वह आवाज़ें सुन रहा हो हाँला कि उसके आसपास कीड़े भी नहीं ?
- 1.4 (16) जैसे कहना कि जैसे उस का कोई पीड़ा कर रहा हो उसे बल्लेश दे रहा हो या लोग उसे जान बूझ कर तंग कर रहे हैं ? (साक्षात्कर्ता स्थानीय विचारों से अनुभूत हो जिनसे पता लगे कि उन्माद, शक या वहम के क्या लक्षण हैं)

- | | | | | | | |
|----------|---|--------------------------|--------------------------|--------------------------|--------------------------|-------|
| 1.4 (7) | Attempt to harm or kill himself? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 21-24 |
| 1.4 (8) | Cause damage to property, e.g. destroy things or set fire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 25-28 |
| 1.4 (9) | Go away suddenly to another part of the country without giving good reason for doing so? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 29-32 |
| 1.4 (10) | Spend many hours in a church or a temple when formerly he used to spend much less time there? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 33-36 |
| 1.4 (11) | Get very irritable, quarrelsome or angry for days or weeks without sufficient reason? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 37-40 |
| 1.4 (12) | Spend money in a wild and irresponsible fashion, quite unlike his former self? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 41-44 |
| 1.4 (13) | Do anything inappropriate, indecent or annoying that would upset many people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 45-48 |
| 1.4 (14) | Talk incomprehensively, so that no one could understand what he wanted to say? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 49-52 |
| 1.4 (15) | Behave on more than one occasion as if hearing voices when no one around was actually talking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 53-56 |
| 1.4 (16) | Say that he was being persecuted, harmed, or bewitched by other people?
(Interviewer should fill in popular local contents of paranoid ideation) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 57-60 |

- 1.4 (17) कई दिन या हफ्ते बिना बस अथवा मशीन या चिन्तित लगी ?
- 1.4 (18) असंभव बातों के बारे में बात करता है जैसे भगवान उल्टे बातें करता है, लोग उसके विचार जनते हैं, सब उसके बारे में बातें करते हैं, और (साक्षात्कर्ता वहम और असंगत विचारों के बारे में स्थानीय प्रचलित विचारों से स्वयं भी अवगत करते हैं)
- 1.4 (19) उदास, निराश और शोकाकुल लगी ?
- 1.4 (20) शैली है कि उसकी माददाहत शैली थी कि उसे पता भी नहीं था कि वह कहां था या क्या कर रहा था?
- 1.4 (21) मृत्यु के बारे में ऐसे बात करते हैं वृत्त अभी जीवित हैं?
- 1.4 (22) किसी एक विचार को अपने दिमाग में न निकाल पाने की कोशिश करते रहने के बाद भी चिन्ताकुल ही ?
- 1.4 (23) लगातार शारीरिक पीड़ा और दर्द (सिर में या शरीर के दूसरे अंगों में) की शिवायत करे ? (साक्षात्कर्ता को चाहिए कि वह शारीरिक पूर्व धारणा के बारे में स्थानीय प्रचलित विचारों से अपने आप भी अवगत करें)
- 1.4 (24) यह धारणा मन में ही कि उसे लाइलाज बिमारी है हालांकि डॉक्टर और दूसरे परिचारकों ने उसे बताया है कि उसे कोई नजलीफ नहीं है ?

Card 2

- 1.4 (17) Look very frightened or
anxious for days or weeks
without good reason? 61-64
- 1.4 (18) Claim unlikely or impossible
things, for example that God
was talking to him, or people
could read his thoughts, or
everybody was talking about
him, or people being not what
they appeared to be, etc?
(Interviewer should fill in
local contents of delusional
beliefs) 65-68
- 1.4 (19) Look very sad, mournful or
hopeless? 69-72
- 1.4 (20) Say that he had lost his
memory for a time so that he
did not know where he was and
what he was doing? 73-76

Card 3

Cols.

- 1.4 (21) Talk about somebody who is
dead as if that person was
still alive? 21-24
- 1.4 (22) Act as if he could not get
a particular thought out of
his head? 25-28
- 1.4 (23) Complain persistently of
various aches, pains or funny
sensations in his body or
head? (Interviewer should
fill in popular local
contents of morbid pre-
occupations with own body) 29-32
- 1.4 (24) Think he was suffering from an
incurable illness while doctor
(or other health worker) had
said that nothing was wrong
with his health? 33-36

1.4 (25) अथवा भविष्य के बारे में जल्पनात्मक चिंतन में
 अनात्म-तत्त्व जिनका वास्तविकता से कोई सम्बन्ध
 नहीं है ?

1.4 (26) कोई ऐसी असाधारण बात भी हो या नहीं हो
 जो मैंने अभी तक नहीं सुनी ? क्या आप
 उसका वर्णन कर सकते हैं और उदाहरण दे
 सकते हैं ?

1.4 (27)

1.4 (28)

1.4 (29)

- 1.4 (25) Talk about great new plans he had for the future in a way he had never done before? 37-40

- 1.4 (26) Do or say anything else out of the ordinary which I have not mentioned so far? Can you describe it and give me an example?

 41-44

- 1.4 (27) -----
 45-48

- 1.4 (28) -----
 49-52

- 1.4 (29) -----
 53-56

1.5

आपने रोगी द्वारा भी दुई या कही दुई कई अंशगत और असाधारण धारों वताईं निम्नी वजह से आपको लगा कि वह बदल जाये हैं। इसके बारे में सोच कर क्या आप क्या सकते हैं कि यह बदलाव अचानक (उदाहरण कुछ दिनों में), या धीरे धीरे (महीने या कई हफ्तों में) हुआ ?
 साक्षात्कार को चाहिए कि वह किसी घटना को उदाहरणतः सूचनादाता के सामने पेश कर पूछे और जोंच पड़ताल करे।

1.5

सूचनादाता के विचार में रोगी की लक्षणाओं की शुरुआत की निम्नलिखित में एक उत्तर को सूचित करें :

- 1 = अचानक शुरुआत। मानसिक लक्षण कुछ दिनों के अन्दर (एक हफ्ते से कम) शुरू हुए। इससे पहले कोई लक्षण बिल्कुल नहीं थीं।
- 2 = शीघ्र शुरुआत जिसमें एक या ज्यादा लक्षण (एक हफ्ते से कम) शुरू हुए परन्तु पिछले लक्षण प्रस्तुत भिन्न गये।
- 3 = तीव्र शुरुआत जिसमें लक्षण एक महीने तक प्रस्तुत हुए परन्तु पिछली उपस्थिति में लक्षण बिल्कुल नहीं थीं।
- 4 = तीव्र शुरुआत जिसमें लक्षण एक महीने तक प्रस्तुत हुए परन्तु उससे पहले लक्षण थीं।
- 5 = अपट या धूर्त लक्षण जो धीरे धीरे कई महीनों में बढ़ीं रहीं।
- 6 = सूचनादाता स्वस्थ और अस्वस्थ स्थिति में पार्क कर लेने में असमर्थ।
- 7 = शुरुआत के बारे में सूचनादाता को वर्णन उपर्याप्त या अपूर्ण।
- 8 = प्रश्न पूछा नहीं गया।

1.5 "You told me about some unusual things that X did or said, which made you think that he was not behaving like his former self. When you think of it, did this change in X develop quite suddenly, say within days, or slowly, over a longer period of time, maybe in weeks or even months? How about... /interviewer picks up examples of abnormal behaviour recorded under previous item/, did it start suddenly? Has X never before been like this/or said, done, etc./?"

1.5 RATE INFORMANT'S IMPRESSION OF MODE OF ONSET OF PATIENT'S DISORDER

- 1 = Clearly sudden onset, one or more psychotic symptoms appeared within days (up to a week); previous psychiatric symptoms can be safely excluded 57
- 2 = Precipitous onset of one or more psychotic symptoms within days, (up to a week) but previous existence of other non-psychotic symptoms likely or certain
- 3 = Acute onset, psychotic symptoms developed over a period of up to one month; previous psychiatric symptoms can be safely excluded
- 4 = Acute onset; psychotic symptoms developed over a period of up to one month; previous existence of other, non-psychotic symptoms likely or certain
- 5 = Insidious, slow incremental development of psychotic symptoms over many months
- 6 = Informant cannot draw a clear demarcation line between health and mental illness in the patient (no clear-cut psychotic symptoms described)
- 7 = Informant's description inadequate for making any judgement about mode of onset
- 8 = Question not asked

- 1.6 रोगी या सूचनादाता सबसे पहले क्यों। किस से सहायता लेनी गये थी-? उसके बाद? फिर उसके बाद? (पड़ोसी या दोस्तों की सहायता क्यों नहीं मिली जाएगी)। साक्षात्कर्ता को चाहिए कि वह सहायता के सभी स्त्रोतों के बारे में अच्छी तरह पूछे। सबसे आखिरी जवाब इस दारिद्र्य या सहायता का जवाब होगा।

- 1.6 अलग अलग सहायक स्त्रोतों की लगातार सूची

1	2	3	4	5	6	7

- 1 = मनोचिकित्सक या मानसिक स्वास्थ्य कर्ता
 2 = दूसरे डाक्टर या विशेषज्ञ
 3 = नर्स परिचारिका, सौशल वर्कर या दूसरे स्वास्थ्यकर्ता
 4 = पुलिस
 5 = वैद्य, इमीम, यूनानी तिगिया या दूसरे विशेषज्ञ जैसे हीन्योपेथ
 6 = पांडित, पुरोहित, ज्ञानी, मुल्ला, इमाम या दूसरे धार्मिक लोग
 7 = और (वर्णन करें _____)
 8 = अनिश्चित (स्त्रोत से सम्पर्क हुआ परन्तु पूरा पता नहीं)
 9 = अज्ञात

1.6 "Where did X/or informant/first go for help? Then where did X/or informant/next go for help?" /Interviewer continues in this matter until informant has enumerated all different sources of lay or professional help outside the household. Help from neighbours or relatives (unless they are professionally qualified) is not rated here. The last entry in the sequence of boxes below should refer to present treatment./

Note: Rate only first contacts with a particular type of helping agent. For example, a patient who made three visits to two different traditional healers, then saw a general practitioner who referred him to a psychiatrist with whom the patient had two outpatient sessions, and then hospitalization during which he was treated by another psychiatrists, should be rated 5 2 1. A contract is a transaction between patient and helping agent which leads to some actions related to the management or treatment of a problem that in the rater's judgement was part of, or associated with the patient's mental illness.

1.6 RECORD CONSECUTIVE WITH DIFFERENT HELPING AGENTS

Card 3

Cols.

1st	2nd	3rd	4th	5th	6th	7th

58-64

- 1 = Psychiatrist or other mental health professional
- 2 = General practitioner or other medical specialist (non-psychiatric)
- 3 = Nurse, other health worker, or social worker
- 4 = Police
- 5 = Traditional healer or non-allopathic practitioner (include here homeopaths, naturopaths, acupuncturists, etc. Specify _____)
- 6 = Priest or other religious person
- 7 = Other specify _____
- 8 = Unspecified (contact took place but type of agent unknown)
- 9 = Unknown

- 1.7 रोगी सहायता के लिए कब जाया? (प्रथम स्त्रोत)। घटना के साथ समय की अवधि तब जांच पड़ताल जरूरी है।
- 1.7 प्रथम स्त्रोत से अबतक कितने हफ्ते बीमारी की शुरुआत से हुए हैं?

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- 1.8 आपके विचार में रोगी को क्या तकलीफ है? क्या कारण बता सकते हैं जिससे यह बीमारी हुई? जांच पड़ताल करें: उदाहरण दीजिए, सबसे बड़ी क्या बात हुई? सूचनादाता को जवाब देने दें। पूरा वर्णन लिखें।

- 1.8 रोगी या सूचनादाता की धारणा का वर्णन करें:

- 0 = कोई धारणा या वर्णन नहीं
- 1 = समस्या से इन्कार, कोई बात गलत नहीं
- 2 = समझते हैं कि कोई बात तो है परन्तु श्वास-बात नहीं
- 3 = मानसिक रोग की वजह से समस्या
- 4 = समस्या शारीरिक रोग के कारण
- 5 = आत्मिक, धार्मिक या भौतिक कारण (उदाहरण आत्मा की पुकार, आजाशवाणी या देवी पुकार)
- 6 = जादू, शाप, दुना, वगैरह
- 7 = अस्वीकार्य व्यवहार (उदाहरण, बिस्तर में लीट रहना, काम न करना, सुन्न, गन्धी आदतें)
- 8 = और (वर्णन करें)
- 9 = प्रतिकूल

1.7 "When did X go for help to.../ name the first contact recorded under the preceding item/. Cross-examine using a time frame of reference familiar to the informant and estimate the number of weeks that have elapsed since first contact.

1.7 RATE NUMBER OF WEEKS SINCE FIRST CONTACT WITH A HELPING AGENCY RELATED TO CURRENT MENTAL DISORDERS

No. of weeks ago (999 if impossible to estimate) 65-67

1.8 "What do you believe is the matter with X?" "What do you think might have caused it?" Cross examine: "Can you tell me more about it? Could it be.../give example/? What do you think is the main problem?" INTERVIEWER SHOULD AVOID SUGGESTING POSSIBLE ANSWERS TO THE INFORMANT. Code the conceptualization which informant considers most likely. Record actual words of informant.

1.8 RATE INFORMANT'S OR PATIENT'S OWN CONCEPTUALIZATION OR NATURE OF PATIENT'S CURRENT PROBLEM

0 = No conceptualization, informant has no explanation 68

1 = Nothing wrong, problem denied

2 = Feels something is wrong but no specific problem described

3 = Problem seen as mental illness (e.g. "nerves", depression, schizophrenia, etc.)

4 = Problem seen as physical illness

5 = Problem seen as a spiritual, religious or a moral one (e.g. a "revelation", "pangs of conscience". etc)

6 = Magic, curse, taboo, etc.

7 = Unacceptable behaviour (e.g. lies in bed, won't work, poor habits, etc.) or motivation (e.g. Lazy)

8 = Other specify _____

9 = Not applicable

1.9 दूसरों में (उदाहरण डाक्टर, वैद्य, पंडित, सौम्य वकील वगैरह घर में बाहर लोग) रोगी की तकलीफ़ और बीमारी के बारे में क्या सूचना दी है? (यदि विरुद्ध वर्णन और सूचना दी हो तो सबका वर्णन लिखें।)

1.9 रोगी की समस्या के कारण (जो रोगी या सूचनादाता को दिख जाते हैं) का वर्णन करें:

0 = नहीं 1 = हाँ

यदि बाहरी स्त्रियों से सम्पर्क नहीं हुआ तो 8 भरें।

1.9.1 कोई सूचना नहीं दी

1.9.2 बताया गया कि कोई बात नहीं या समस्या से नकार

1.9.3 बताया गया कि कुछ गलती है परन्तु पूरा वर्णन नहीं

1.9.4 मानसिक रोग

1.9.5 शारीरिक रोग

1.9.6 आत्मिक, धार्मिक या नैतिक कारण

1.9.7 जादू, शाप, टीना वगैरह

1.9.8 अस्वीकार्य व्यवहार जो वजह से समस्या

1.9.9 और _____ वर्णन करें: _____

1.9 "What has... /psychiatrist, other doctor, healer, priest, social worker, or anyone else outside the family involved in the management of the present problems of the patient/told you is the matter with X?" (Try to assess if conflicting opinions and advice were given by different persons; id so, rate as many explanations as relevant)

1.9 RATE EXPLANATION OF NATURE OF PATIENT'S PROBLEM AS GIVEN TO INFORMANT OR PATIENT BY OUTSIDE AGENCIES

0 = No .
1 = Yes

If no outside agencies involved up to the present moment, fill in 8's

1.9.1	No explanation given	<input type="checkbox"/>	69
1.9.2	Was told nothing was wrong, problem denied	<input type="checkbox"/>	70
1.9.3	Was told something was wrong but no specific nature of the problem outlined	<input type="checkbox"/>	71
1.9.4	Mental illness (e.g. "nerves", depression, schizophrenia, etc)	<input type="checkbox"/>	72
1.9.5	Problem explained in terms of physical illness or illness or physical/mental interaction	<input type="checkbox"/>	73
1.9.6	Problem explained in spiritual, religious or moral terms	<input type="checkbox"/>	74
1.9.7	Magic, curse, taboo, etc	<input type="checkbox"/>	75
1.9.8	Problem explained as unacceptable behaviour (e.g. habits) or motivation	<input type="checkbox"/>	76
1.9.9	Other, (specify) _____	<input type="checkbox"/>	77

- 1.10 आपकी विचार में इस समस्या के क्या कारण हैं? और
कुछ? प्रमुख कारण क्या हैं? जोंच पड़ताल करें। इसके
द्वारे में कुछ और बता सकते हैं? उदाहरण दीजिए...
- 1.10 सूचनादाता के विचार में रोगी की समस्या के कारण..
0 = नहीं 1 = हाँ 8 = प्रतिकूल 9 = अज्ञात
- 1.10.1 बीड़ी बर्णन नहीं। सूचनादाता बीड़ी कारण बताने में असमर्थ
- 1.10.2 पैरुम्। पुश्तैनी कारण उदाहरण इसके चाचा। मां। आप
की वजह से
- 1.10.3 बीमारी की वजह से जीविक कारण उदाहरण दिमाग
पर चीट, मलैरिया हुआ
- 1.10.4 नशे की लत जैसे शराब, गांजा
- 1.10.5 श्पुराक और खाने की कमी जैसे ज्यादा या कम खाना
- 1.10.6 वातावरण के प्रभाव जैसे बुरी हवा, गर्मी बर्जैरह
- 1.10.7 व्यक्तिगत सम्बन्धों में दीख जैसे घर में भागड़ा,
प्यार में निराशा, क्लेश
- 1.10.8 रोगी के चरित्र और जीवन व्यवहार में कारणवश
जैसे धिन्ता, ज्यादा या कम खैब्स, धात
- 1.10.9 सामाजिक वातावरण के कारणवश जैसे प्रवास,
सांस्कृतिक न्यूनता, सामाजिक क्लेश, परिवर्तन
- 1.10.10 अलौकिक कारण जैसे बुरी नजर, भूत प्रेत, औपरे
का असर रोगी द्वारा अप्रस्तावित

Card 4

1.10 "What do you think may have caused the problem? Anything else? What is the main cause?" Probe and cross-examine: "Can you tell me more about it? Could it be.../give examples/?"

1.10 RATE INFORMANT'S EXPLANATION OF THE CAUSE OF PATIENT'S CURRENT PROBLEM

0 = No
1 = Yes
8 = Not applicable or not inquired;
9 = Uncertain

- | | | | |
|---------|--|--------------------------|----|
| 1.10.1 | No explanation, informant cannot identify any specific cause | <input type="checkbox"/> | 21 |
| 1.10.2 | Cause seen in <u>heredity</u> (e.g. "born that way", "got it from his mother", "his uncle was like that", etc.) | <input type="checkbox"/> | 22 |
| 1.10.3 | Cause seen in <u>faulty biological functioning</u> due to disease, brain disturbance or injury (e.g. "had malaria", "fell on his head", etc.) | <input type="checkbox"/> | 23 |
| 1.10.4 | Cause seen in <u>substance abuse</u> (e.g. "drinks too much", "had marijuana", "smokes too much", etc.) | <input type="checkbox"/> | 24 |
| 1.10.5 | Cause seen in <u>faulty nutritional habits</u> (e.g. undernourishment, eating too much or too little of a particular food, etc.) | <input type="checkbox"/> | 25 |
| 1.10.6 | Cause seen in <u>physical effects</u> of environment (e.g. "heat", "bad air" etc.) | <input type="checkbox"/> | 26 |
| 1.10.7 | Cause seen in <u>intimate interpersonal relationships or family life</u> (e.g. "unhappy family life", "spouse ruined his/her health", "love disappointment", etc.) | <input type="checkbox"/> | 27 |
| 1.10.8 | Cause seen in patient's <u>character, or lifestyle</u> (e.g. "bad apple", "worries too much", "overwork", "fatigue", "stress", "too much sex", "no sex", etc.) | <input type="checkbox"/> | 28 |
| 1.10.9 | Cause seen in <u>social environment</u> (e.g. "cultural deprivation", "social class", "social change", "migration", etc.) | <input type="checkbox"/> | 29 |
| 1.10.10 | Cause seen in <u>supernatural forces</u> (e.g. "bewitchment", "spirits", "evil eye", etc.) <u>unprovoked</u> by patient | <input type="checkbox"/> | 30 |

1.10.11 अलैंगिक कारण जैसे थूरी नज़र, भूतप्रेत, जीपरी का असर, रोगी द्वारा प्रस्तावित बंधुंमि उसने रुझावट डाली

1.10.12 ख्यास घटना के कारण जैसे साँप की देख कर भड़का

1.10.13 और बर्णन करे' ...

1.10.14 आप रोगी की कितना जिम्मेवार ठहराते हैं (उसकी इस हालत के लिए) ?

1.10.14 रोगी या उसकी सूचनादाता के विचार में क्या जिम्मेवारी ठहराई जाई है ?

0 = कोई जिम्मेवारी या नियंत्रण नहीं

1 = अधूरी जिम्मेवारी और नियंत्रण

2 = पूरी जिम्मेवारी और नियंत्रण

8 = प्रतिकूल या पूछा नहीं

9 = अनिश्चित

सूचनादाता के विचार का लिखित बर्णन यहाँ

1.10.11 Cause seen in supernatural forces (e.g. "bewitchment", "spirits", God's wrath, etc.) provoked by patient through breaking of taboo 31

1.10.12 Cause seen in specific precipitating event of special significance (e.g. "saw a snake and panicked") 32

1.10.13 Other cause (specify) _____ 33

1.10.14 "How much do you hold the patient responsible for the condition?"

1.10.14 Rate degree of patient's own responsibility or control over cause of disorder according to informant 34

- 0 = No responsibility or control
- 1 = Partial responsibility or control
- 2 = Total responsibility or control
- 8 = Not applicable or not inquired
- 9 = Uncertain

Please write a brief narrative about cause(s) as perceived by informant _____

1.15 क्या आप रोजी की शराब पीने की आदत से वाकिफ हैं? यदि हाँ, तो क्या रोजी ज्यादा पीता है, पिछले साल में शराब के कारण क्या निम्नोत्पत्त कति हुई? (पारिवारिक तनाव, नींदसी या कानून से समस्या, सेक्सीडर, शारीरिक समस्याएं कौनसे के बारे में ब्रह्मताद करें)

1.15 पिछले साल में शराब के प्रयोग के बारे में वर्णन:

0 = बिल्कुल नहीं

1 = कभी-कभी सामाजिक तौर पर

2 = मध्यम प्रयोग

3 = शराब की गम्भीर समस्या का शक

4 = शराब की गम्भीर समस्या

9 = अज्ञात

1.16 भरत बूढ़ें यदि सूचनादाता ने अधिक या यथाक्रम शराब पान के लिए इन्कार किया।

क्या रोजी ने मदिरापान के लिए कभी इलाज करवाया है?

1.16 मदिरा पान की समस्या के निदान का वर्णन:

0 = नहीं

1 = हाँ पूरा वर्णन करें। कब और क्या?

8 = प्रतिकूल। अधिक या यथाक्रम मदिरापान का चिन्ह नहीं

9 = अज्ञात

1.15 "Could you tell us something about X's drinking habits? Do you think that X drinks too much? During the past one year has X had any of the following problems, because of drinking?" /Inquire about family tension, job difficulties, trouble with the law, physical symptoms or illnesses, accidents, etc. - due to use of alcohol./

Card 5

Cols.

1.15 RATE ALCOHOL USE IN LAST YEAR

21

- 0 = None at all
- 1 = Only occasional social drinking
- 2 = Moderate use of alcohol
- 3 = Serious alcohol problem suspected
- 4 = Clear evidence of serious alcohol problem
- 9 = Not known

1.16 Do not ask if excessive or regular use of alcohol denied by informant./ "Has X ever had any treatment for a drinking problem?"

1.16 RATE TREATMENT FOR ALCOHOL PROBLEM IN THE PAST

22

- 0 = No
- 1 = Yes (specify what treatment and when _____

- 8 = Not applicable, no evidence of excessive or regular use of alcohol
- 9 = Not known

- 1.17 क्या आप जानते हैं कि सेगी ने गांजा, अफीम वगैरह
 का नशा किया है ? या बाबत धराने या बढ़ाने के लिए
 सिगरेट और चीजों का प्रयोग किया है ? क्या ? कब ? कितनी ?
 क्या वह आपकी जानकारी से ज्यादा ले रहे हैं ?

पिछले साल में कितनी ली ?

0 = पिछले साल में बिल्कुल नहीं

1 = सिर्फ़ शक है

2 = अभी कम। केवल 3-4 बार ज्यादा का सुबहा नहीं

3 = अभी कम परन्तु ज्यादा लेने का सुबहा

4 = पाँच से ज्यादा बार

8 = प्रश्न नहीं पूछा

9 = कोई सूचना नहीं मिली

घटि 2, 3, 4 पर रेट किया है तो साक्षात्कार की निम्नलिखित
 चीजों के प्रयोग के बारे में पूछना चाहिए :

0 = नहीं 1 = हाँ 8 = प्रतिकूल या पूछा नहीं

9 = अनिश्चित

1.17.1 मार्फिया या हैरोइन

1.17.2 अफीम

1.17.3 ऐम्फीशामिन या और

1.17.4 गांजा या माजून

1.17.5 शलश्ल डी

1.17.6 कोकेन

1.17.7 लॉबीयूरेट

1.17.8 दूसरे शान्ति देने वाले तत्व

1.17.9 और _____

1.17 "Do you know if X has ever taken drugs like hashish, 'pep pills'/enumerate any other drugs using their locally known names/for pleasure, or to get more strength, or to calm him down? What was it? When? How often? How did he feel? Do you think he might have been taking it more often than you know?"

RATE DRUG-TAKING IN LAST YEAR

23

- 0 = Drug-taking in last year can be safely excluded
- 1 = Drug-taking suspected only
- 2 = Sporadic/up to 3 - 4 times/ drug-taking in last year known, no reason to suspect more frequent abuse
- 3 = Sporadic drug-taking in last year known, but there are reasons to suspect that more frequent abuse actually occurred
- 4 = Five or more instances of drug-taking known
- 8 = Question not asked
- 9 = No information obtained from informant

IF RATING OF EITHER 2, 3 OR 4 MADE ABOVE, INTERVIEWER SHOULD ATTEMPT TO ELICIT INFORMATION ABOUT THE NATURE OF THE SUBSTANCE(S) TAKEN

- 0 = No
- 1 = Yes
- 8 = Not applicable or not inquired
- Q = Uncertain

- 1.17.1 Morphine or Heroin
- 1.17.2 Opium or Derivatives
- 1.17.3 Amphetamines or Derivatives
- 1.17.4 Hashish or Marijuana
- 1.17.5 Hallucinogens (LSD and others)
- 1.17.6 Cocaine
- 1.17.7 Barbiturates
- 1.17.8 Non-barbiturates sedatives and tranquilizers
- 1.17.9 Other (specify _____)

	24
	25
	26
	27
	28
	29
	30
	31
	32

1.18 यदि तत्व दुरुपयोग का कोई शक नहीं है तो यह सवाल न पूछें।
 क्या बीगी ने तत्व दुरुपयोग के लिए बलाज करवाया है ?

0 = नहीं 1 = हाँ (क्या और क्या ?)

8 = प्रतिकूल। तत्व दुरुपयोग की ओर सारी नहीं

9 = अज्ञात

1.19 मैं अब आपसे यह सवाल पूछना चाहूँगा। चाहूँगी जो हम सबसे पूछते हैं। क्या बीगी का अभी पुलिस या आर्यून से किसी तरह का वास्ता पड़ा है ? (यदि उत्तर से आलसता ही तो गिरफ्तारी, प्रीवेंशन वॉरंट के बारे में अच्छी तरह पूछना चाहिये)

1.19 दुर्म की वजह से आर्यून से सम्पर्क का इतिहास :

0 = नहीं 1 = हाँ 8 = अनिश्चित 9 = अज्ञात

1.19.1 गिरफ्तारी

1.19.2 जेल वॉरंट में बन्दी

1.19.3 प्रीवेंशन (परीक्षा काल)

यदि हाँ तो पूरा विवरण नीचे :

गिरफ्तारी
 या
 चार्ज शर्तों
 की
 तारीख

दुर्म

रजा

कहाँ और
 (जितनी देर)
 किसी संस्था

बिठनी देर

1.18 Do not ask if no evidence of drugs use.
"Has X had any treatment for a drug problem?"

RATE TREATMENT FOR DRUG PROBLEM IN THE PAST

33

0 = No
1 = Yes (specify what treatment and when _____)

8 = Not applicable, no evidence of drug use
9 = Not known

1.19 "I want now to ask you a question we ask routinely of everybody:
has X ever had any kind of trouble with the law, or the Police?"
/If reply suggestive of a possibility of past contacts with the
law, probe further about arrests, detection in an institution,
probation, etc., and obtain details to fill in the following
chart./

1.19 HISTORY OF CONTACTS WITH THE LAW BECAUSE OF OFFENCE(S)

0 = No
1 = Yes
8 = Uncertain
9 = Not known

34
 35
 36

- 1.19.1 Arrested
- 1.19.2 Detained in an institution
- 1.19.3 Probation

IF RATED POSITIVE ABOVE, FILL IN DETAILS:

Date of charge or arrest	A. Nature of offence or charge	B. Verdict and sentence (if any)	C. Type of institution in which sentence if any, was served	D. Time in institution or on probation

1.20 इस सभी सूचना के अनुसार जितनी महीने से
बीमारी की शुरुआत की संभावना लिखें

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निम्न जाह में रोगी के शुरु के लक्षण और चिन्ती की
अच्छी तरह से संभावना का वर्णन किया जाना चाहिए।
इस वर्णन में रोग के शुरु होने से पहले के लक्षण, रोग की
शुरुआत और ज़रूरी सूचना लिखी जानी चाहिए।

1.20 ON THE BASIS OF ALL INFORMATION AVAILABLE ESTIMATE THE NUMBER OF MONTHS SINCE THE ONSET OF THE CURRENT MENTAL DISORDER IN THIS PATIENT

(Re-rate this item at end of interview, at any other time if additional data necessitate this.)

			37-39
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No. of months
(999 if impossible
to estimate)

Please write in a brief narrative summary of the early symptoms and signs of the patient's psychotic disorder (including any prodromal or pre-psychotic manifestations), the mode of onset, the evolution of symptoms, and the relevant

दसवाँ हिस्सा प्रवृत्ति। व्यवसायिक उपलब्धि

10. क्या इस शैली में अभी वैतनिक काम किया है ?

10.1 यदि वैतनिक काम किया है तो कर्ण (चाहे स्वयं वैतनिक ही हो)

0 = नहीं 1 = हाँ 9 = अज्ञात

10.2 कितने साल नौकरी की

01 = एक साल से कम

99 = अज्ञात

10.3 नौकरी न होने के कारण :

0 = गृहिणी 2 = विद्यार्थी 3 = और —

8 = प्रतिशुल 9 = अज्ञात

यदि शैली में अभी भी वैतनिक काम किया तो क्या किया ?

10.4. शैली की प्रधान नौकरी। व्यवसायिक उपलब्धि

00 = रिटायर्ड। पेंशन गृह

01 = खेती बाड़ी में रह (अपना या संगठन का)

02 = खेती बाड़ी में (दूसरे द्वारा दिया)

03 = कारीगर (संगठन में या स्वयं लीन)

04 = प्रिंटर में (अप्रवीण या अर्ध-प्रवीण)

05 = प्रिंटर में (प्रवीण)

06 = क्लर्क या प्रबन्धकर्ता (अप्रवीण या अर्ध-प्रवीण)

07 = क्लर्क या प्रबन्धकर्ता (प्रवीण जैसे लिपिक या मैनेजर)

08 = व्यवसायी जैसे दुकान पर या गली में बेचने वाला

09 = व्यवसायी परन्तु प्रवीण और कुछ जैसे नर्स

10 = व्यवसाय का मालिक (दस एक लोगों की नौकरी)

11 = दस से ज्यादा लोगों की नौकरी के व्यवसाय का मालिक

PART 10 - OCCUPATION

10. Has the patient ever had a paid job (earning occupation)?

Card 15

Cols.

10.1 RATE IF EVER EMPLOYED (INCLUDE SELF-EMPLOYED)

- 0 = No
1 = Yes
9 = Not known

 3210.2 TOTAL NUMBER OF YEARS OF EMPLOYMENT (INCLUDE SELF-EMPLOYED,
DO NOT INCLUDE HOUSEWIFE OR STUDENTS)

- 01 = Less than one year
99 = Not known

 33,34

10.3 RATE REASON FOR NEVER HAVING HAD A PAID JOB

- 0 = A Housewife
2 = A Student
3 = Other (specify _____)
8 = Not applicable
9 = Not known

 35

If patient ever had an earning occupation, describe main occupation

10.4 RATE PATIENT'S MAIN OCCUPATION

- 00 = Retired, pensioner
01 = Agricultural worker - self-employed farmer
or member of a cooperative
02 = Agricultural worker - employed or paid in kind
03 = Craftsman, artisan, etc. (self-employed, employed,
or member of a cooperative)
04 = Industrial worker - unskilled or semi-skilled
05 = Industrial worker - skilled (e.g. foreman)
06 = Clerical or administrative occupation -
or semi-skilled (e.g. messenger)
07 = Clerical or administrative occupation -
skilled (e.g. secretary)
08 = Service - trade occupation - unskilled or semi-
skilled (e.g. street vendor, shop assistant)
09 = Service or trade occupation - skilled (e.g. nurse)
10 = Owner of small or medium-size business (employing up
to 10 people)
11 = Owner of business employing more than 10 people

 36,37

- 12 = व्यवसाय नियुक्त जैसे डाक्टर, अंचल अप्सर
 13 = प्रोजेक्ट अप्सर
 14 = गृहिणी
 15 = वीरजगार
 16 = विद्यार्थी
 17 = और
 18 = प्रतिसूल
 19 = अज्ञात वर्णन _____

10.5 विद्यमान साल में क्या रोगी पूरा काम करता रहा है ?

10.5 विद्यमान साल में रोजगारी

0 = ज्यादा बार से ज्यादा और महीने से ज्यादा वीरजगार रहा

1 = सारा समय काम करता रहा है

8 = प्रतिसूल । रोगी के पास अभी नौकरी न थी

9 = अज्ञात

10.6 यदि रुक से ज्यादा बार वीरजगार रहा है क्या कारण था ?

10.6 वीरजगारी का कारण वर्णन करें:

0 = मानसिक रोग

1 = शारीरिक रोग और निष्कलता

2 = रोजगार की प्रधान समस्या

3 = और ... वर्णन करें _____

4 = ऊपर लिखित का मिश्रण

8 = प्रतिसूल । रोगी के पास नौकरी न थी

9 = अज्ञात

- 12 = Professional (e.g. doctor), high level executive
or administrator
13 = Military (officer rank)
14 = Housewife
15 = Unemployed
16 = Student
17 = Other
88 = Not applicable
99 = Not known

Specify occupation _____

10.5 During the past one year, has the patient been working all the time?

10.5 RATE EMPLOYMENT (OR EARNING JOB) IN PAST ONE YEAR

- 0 = Has experienced one or more period of unemployment lasting one month or more 38
1 = Has been working practically all the time
8 = Not applicable, patient never had a paid job
9 = Not known

10.6 If the patient has had one or more periods of unemployment during the last year, what was the cause of the unemployment?

10.6 RATE REASON FOR UNEMPLOYMENT

- 0 = Patient's mental illness 39
1 = Physical illness or disability
2 = General employment situation (specify _____)
3 = Other (specify _____)
4 = Combination of the above _____
8 = Not applicable, patient was not unemployed
9 = Not known

10.7 यदि रोजगार शुद्ध हो रोगी क्या पूरी तरह या आंशिक रूप में बाम करने रहे है ?

10.7 पिछले साल में बाम करने के हालात कैसे रहे ?

0 = पूरी तरह। सामान्य स्थिति

1 = पूरी तरह। आक्रामक स्थान में

2 = आंशिक बाम। सामान्य स्थिति

3 = आंशिक बाम। आक्रामक स्थान में

4 = कुछ पूरा। कुछ आंशिक सामान्य स्थिति में

5 = कुछ पूरा। कुछ आंशिक आक्रामक स्थान में

6 = और _____

8 = प्रतिकूल। रोगी के पास कोई नोमरी न थी

9 = अज्ञात

10.8 क्या रोगी ने नोमरी बदली है ?

10.8 रोगी की नोमरी बदल या वर्णन करें :

0 = नहीं। 1 = एक बदलाव 2 = दो बदलाव

3 = तीन या ज्यादा बदलाव

8 = प्रतिकूल। रोगी के पास कोई नोमरी न थी

9 = अज्ञात

10.9 रोगी की औसतन आमदनी क्या थी ?

क) स्थानीय समुदाय (बिरादरी) से सम्बन्धित

ख) राष्ट्रीय समुदाय से सम्बन्धित

0 = ऊपरी एक तिहाई आमदनी से सम्बन्धित

1 = मध्यम एक तिहाई आमदनी से सम्बन्धित

2 = निम्न एक तिहाई आमदनी से सम्बन्धित

8 = प्रतिकूल। रोगी के पास कोई नोमरी न थी

9 = अज्ञात

10.7 If employed, has the patient's work during the last year been mainly part-time or full-time?

10.7 RATE CONDITIONS OF WORK IN PAST YEAR

- 0 = Full-time only, normal conditions
 1 = Full-time only, sheltered conditions
 2 = Part-time only, normal conditions
 3 = Part-time only, sheltered conditions
 4 = Some full-time and some part-time periods, normal conditions
 5 = Some full-time and some part-time periods, sheltered conditions
 6 = Other (specify _____)
 8 = Not applicable, patient did not have a paid job in the past year
 9 = Not known
- 40

10.8 Has the patient changed jobs during the past year?

10.8 RATE CHANGES OF JOBS IN PAST YEAR

- 0 = No change
 1 = One change
 2 = Two changes
 3 = Three or more changes
 8 = Not applicable, patient did not have a paid job in the past year
 9 = Not known
- 41

10.9 What was the average level of the patient's gross earned income during the last year?

- a. In relation to the local community 42
 b. In relation to the country as a whole 43
- 0 = Upper one-third of the earned income range
 1 = Middle one-third of the earned income range
 2 = Lower one-third of the earned income range
 8 = Not applicable, patient did not have a paid job in the last year
 9 = Not known

10.10 विद्युत् नोकरों में शैली की जिम्मेदारी की कृत करें।

10.10 जिम्मेदारी की डिग्री कितनी थी ?

0 = कम । लगातार निरीक्षण

1 = मध्यम । अभी-कभार निरीक्षण

2 = ऊँची । शैली दूसरों का निरीक्षण करता था

3 = काम में निरीक्षण की जरूरत नहीं

4 = प्रतिकूल । शैली के पास कोई नोकरों नहीं थी

5 = अज्ञात

10.11 नोकरों के हिसाब से शैली की सामाजिक नियति की कृत करें।

10.12 सामाजिक नियति का वर्णन :

0 = कम 1 = औसत 2 = ऊँचा

3 = कृतने में असंभव

4 = प्रतिकूल (कारण लिखें _____)

10.12 क्या शैली की इस नोकरों की सामाजिक नियति उस की उच्चतम सामाजिक नियति के बराबर है ?

वर्णन करें :

0 = वही या ऊँची 1 = नीची 2 = प्रतिकूल

3 = अज्ञात

10.12 शैली की काम करने और काम पर जाने की योग्यता और काम की गुणवत्ता (घर के काम की दौड़कर) के लक्षण ध्यान में रखें।

10.10 Estimate the degree of responsibility patient has in his last job?

10.10 RATE DEGREE OF RESPONSIBILITY IN JOB

- 0 = Little: works under constant supervision
 1 = Moderate: works mainly on his/her own with little or occasional supervision 44
 2 = High: patient supervises others
 3 = Nature of work does not involve supervision by others
 8 = Not applicable, patient never had a paid job
 9 = Not known

10.11 Estimate the degree of prestige (status) of patient's last job in the community

10.11 RATE SOCIAL PRESTIGE OF PATIENT'S JOB

- 0 = Low 45
 1 = Average
 2 = High
 3 = Impossible to estimate
 8 = Not applicable (specify reason _____)

10.12 Is the patient's occupational level in last job the same as his/her highest level in any job before last?

10.12 RATE UPWARD/DOWNWARD CHANGE IN OCCUPATIONAL LEVEL

- 0 = The same or higher 46
 1 = Lower
 2 = Not applicable, patient never employed or started working less than a year ago
 3 = Not known

10.12 Consider: (i) patient's ability to conform to the work routine - going to work regularly and on time, observing the rules, etc; (ii) quality of performance and output. (Household work excluded).

10.13 पिछले साल की नींदरी में काम पूर्णता का वर्णन

0 = शींगी शीजाना काम पर जाता है। काम की गुणता क्षमता और आशा से मिलती है

1 = उस जैसी नींदरी में रह लीगीं के मुआबले में शींगी ज्यादा दुड़ी लेता है, गुणता में अभी हुई या शींगी लगातार बिबाधत करता है बि काम उससे बलबूते से बाहर है। यदि यह आजाय स्थान में ही ली 2 मार्क करना चाहिये।

2 = शींगी काम से अबसर जैर हाजिर होता है या उसे खराब गुणता के कारण नींदरी से जताब दिया गया है।

9 = प्रतिबूल जैसी भरीज या शूटेणी है या काम नहीं करता।

10.14 धरैलू कामजाज में पिछले साल बिगना काम बिया :

0 = पिछले सालीं के अनिबत वीई पार्क नहीं

1 = कुछ गिराव

2 = अधिक गिराव

5 = सुधार

8 = प्रतिबूल। शींगी ने अभी धरैलू काम नहीं बिया

9 = अज्ञात

10.13 RATE WORK PERFORMANCE IN JOB IN LAST YEAR

- 0 = Patient goes to work regularly; output and quality of performance within levels expected for job 47
- 1 = Compared with the average employee in same type of job or in same place, the patient has been absent from work more often, or there has been a decline in his/her output and quality of performance; or patient has complained persistently that work is too heavy for him/her. If about description applies to a sheltered job, rate 2
- 2 = Patient has been absent from work most of the time; or has been fired because of poor performance; or has shown more than once gross neglect at work
- 9 = Not applicable, e.g., patient not working or a house-wife

10.14 RATE PERFORMANCE IN HOUSEHOLD WORK IN LAST YEAR

- 0 = No change in comparison to previous years 48
- 1 = Some deterioration
- 2 = Marked deterioration
- 5 = Improvement
- 8 = Not applicable, patient never did household work
- 9 = Not known

शिक्षा

11.1 शैजी की सबसे ज्यादा शिक्षा का लेवल क्या है ?

11.1 शैजी की शिक्षा का वर्णन :

- 0 = कोई स्कूल नहीं था प्राइमरी स्कूल खत्म नहीं किया।
 1 = प्राइमरी स्कूल खत्म (4-5 साल की पढ़ाई)
 2 = सैकेंडरी स्कूल या बराबरी की शिक्षा
 3 = सैकेंडरी स्कूल और यूनिवर्सिटी की पढ़ाई पूरी
 4 = यूनिवर्सिटी पूरी की
 5 = और दूसरा स्कूल पूरा किया
 9 = अज्ञात

11.2 क्या पिछले साल में शैजी पढ़ाई करता रहा है ?

11.2 पिछले साल में पढ़ाई :

- 0 = नहीं
 1 = हाँ, पूरी पढ़ाई
 2 = हाँ, आंशिक विद्यार्थी और आंशिक कार्यकर्ता
 3 = हाँ, आंशिक विद्यार्थी और पूर्ण रूप कार्यकर्ता
 4 = हाँ, पूर्ण रूप विद्यार्थी और पूर्ण रूप कार्यकर्ता
 5 = कुछ देर पढ़ाई करके छोड़ दी
 9 = अज्ञात

11.3 यदि शैजी विद्यार्थी रहा तो किस तरह की पढ़ाई कर रहा था ?

- 0 = सामान्य 1 = विश्वीय : व्यक्तिय के लिए
 2 = विश्वीय - विद्वान के लिए
 8 = प्रोब्लम। शैजी विद्यार्थी नहीं था 9 = अज्ञात

11.4 यदि विद्यार्थी तो पिछले साल की पढ़ाई का स्तर क्या ?

- 0 = अत्युत्तम 1 = उत्तम 2 = लच्छ
 8 = प्रोब्लम। शैजी विद्यार्थी नहीं था
 9 = अज्ञात

PART II - EDUCATION

11.1 "What is the highest level of completed education the patient has achieved?"

11.1 RATE PATIENT'S LEVEL OF EDUCATION

- 0 = No schooling or unfinished primary school 49
 1 = Finished primary school (e.g. 4-5 years of completed education)
 2 = Finished secondary school or equivalent (e.g. technical or occupational)
 3 = Finished school intermediary between secondary school and university (wherever applies)
 4 = Finished university
 7 = Finished other school (specify _____)
 9 = Not known

11.2 "Has the patient been a student during the past one year?"

11.2 STUDYING DURING PAST YEAR

- 0 = No 50
 1 = Yes, full-time student
 2 = Yes, part-time student and part-time working
 3 = Yes, part-time student and full-time working
 4 = Yes, full-time student and full-time working
 5 = Has been a student for some time but then discontinued
 9 = Not known

11.3 "If patient has been a student during past year, what kind of education was he receiving?"

11.3 NATURE OF STUDY DURING PAST YEAR

- 0 = General (e.g. reading, writing, arithmetic) 51
 1 = Specialized - training for a trade or apprenticeship (specify _____)
 2 = Specialized - academic (specify nature of course _____)
 8 = Not applicable, patient was not a student
 9 = Not known

11.4 RATE WORK (STUDY) PERFORMANCE IN LAST YEAR IF PATIENT WAS A STUDENT

- 0 = Excellent 52
 1 = Fair
 2 = Poor
 8 = Not applicable, patient was not a student
 9 = Not known

धर्म

12-1 क्या रोगी किसी धर्म से सम्बन्धित है या गिरने अगेरह जाता है?

12-1 रोगी की धार्मिक सक्रियता का वर्णन :

0 = कुछ भी नहीं 1 = हाँ। वर्णन

9 = अज्ञात

12-2 क्या रोगी ने धर्म में और दिलचस्पी दिखालाई है (विशेष कर पिछले साल में)

दिलचस्पी का वर्णन करें:

0 = बिल्कुल भी नहीं

1 = कुछ थोड़ा अगेरह मनाए पर बिरादरी से ज्यादा नहीं

2 = औसतन से ज्यादा

8 = अतिशूल 9 = अज्ञात

12-3 धर्म परिवर्तन का वर्णन करें:

पिछले 1-3 साल में क्या

क) रोगी ने धर्म में और परिवर्तन हुआ (जैसे धर्म बदलना या किसी और धर्म में रुचि लेना)?

ख) धर्म के पालन में बढ़ाव या घटाव हुआ?

बदलाव

0 = नहीं

1 = हाँ

8 = अतिशूल

9 = अज्ञात

बढ़ाव / घटाव

0 = नहीं

1 = बढ़ाव

2 = घटाव

8 = अतिशूल

यादें क) या ख) में हाँ या जवाब है तो बदलाव का वर्णन करें:

PART 12 - RELIGION

12.1 "Does patient belong to any particular religious group or church?"

12.1 RATE PATIENT'S RELIGIOUS AFFILIATION (REGARDLESS OF ACTIVITY)

0 = None

1 = Yes (specify religion or denomination)

53

9 = Not known

12.2 "has patient shown any active interest in religion during the past year"?

12.2 RATE CURRENT DEGREE OF RELIGIOUS ACTIVITY

0 = None at all

1 = Observed some rituals or festivities but not more active than average from his cultural and social group

2 = Much more active than average for his cultural and social group

8 = Not applicable

9 = Not known

54

12.3 RATE RECENT CHANGES IN RELIGION

Over the last 1 - 3 years has there been:

a) any change in patient's religion? (e.g. sudden emergence of interest or change to a different religion)

55

b) any increase or decrease of patient's intensity of participation in religious activities?

56

Change

0 = No

1 = Yes

8 = Not applicable

9 = Not known

Increase/decrease

0 = Neither

1 = Increase

2 = Decrease

8 = Not applicable

"If yes to either a) or b) specify the nature of the change:"

14.3 अब मैं आपसे रोगी के व्यक्तित्व के बारे में प्रश्न प्रश्नना चाहूंगा। चाहूंगी। यह व्यक्तित्व इस समस्या के शुरू होने से पहले क्या था?

रोगी के व्यक्तित्व का वर्णन करें। यह चोट का कई सालों तक उपस्थित रहने चाहिए। इसका उन्नीसों में प्रता करना मुश्किल है जहाँ बीमारी जीवन से शुरू हुई है।

14.3 विधायित या प्रीट व्यक्तित्व है (परन्तु बीमारी की शुरुआत से पहले) क्या रोगी ?

0 = अनुपस्थित 1 = उपस्थित 2 = अनिश्चित

3 = प्रतिकूल 4 = अज्ञात या पूछा नहीं

14.3.1 दूसरों के नीचे पर शब्द करता रहा है ?

14.3.2 शिष्यायत करता रहा है कि लोग उस पर ताने मारते हैं ?

14.3.3 अधिक ईर्ष्या दशाति रहा है ?

14.3.4 अपनी गलती होने के बावजूद मानने से इनकार करता रहा है ?

14.3.5 भविष्य और अपने बारे में निराशावादी रहा है ?

14.3.6 अक्सर उत्तेजित और उद्योगी रहा है ?

14.3.7 भूड अपर नीचे जाता रहा है ?

14.3.25 बन्धी हुई आदतों और नियमित कार्यक्रम रहा है ?

14.3.26 विशादी में भाङ्गी या सनकी समझा जाता रहा है ?

14.3.27 दूसरों के विचार में ठन्डा और आवेग रहित रहा है ?

Card 17

14.3 "Now I would like to ask you about the sort of person X was as an adult, up to the moment when his behaviour changed/or present illness started".

14.3 RATE PATIENT'S ADULT PREMORBID PERSONALITY TRAITS

The characteristics listed below should have been present for at least several years before the onset of the illness. This makes it difficult to rate premorbid personality in patients whose illness began in early adolescence

14.3 "AS A GROWN-UP PERSON, (BUT BEFORE ONSET OF ILLNESS), DID THE PATIENT?"

- 0 = Absent or not present in any marked degree
 1 = Present in marked degree
 2 = Uncertain
 8 = Not applicable
 9 = Not known (not asked)

- | | | | |
|---------|--|--------------------------|----|
| 14.3.1 | Appear to be generally suspicious of other people's intentions? | <input type="checkbox"/> | 21 |
| 14.3.2 | Often complain that people were picking in him? | <input type="checkbox"/> | 22 |
| 14.3.3 | Show excessive jealousy? | <input type="checkbox"/> | 23 |
| 14.3.4 | Show marked lack of self-criticism, or inability to see his own fault when he did something wrong? | <input type="checkbox"/> | 24 |
| 14.3.5 | Seem to be generally gloomy and pessimistic about the future? | <input type="checkbox"/> | 25 |
| 14.3.6 | Appear to be generally excited and energetic? | <input type="checkbox"/> | 26 |
| 14.3.7 | His mood go up and down all the time? | <input type="checkbox"/> | 27 |
| 14.3.25 | Have set routine or fixed habits which he had to keep or else got upset? | <input type="checkbox"/> | 45 |
| 14.3.26 | Seem to be considered in the community to be an eccentric? | <input type="checkbox"/> | 46 |
| 14.3.27 | Impress others as being emotionally cool and withdrawn? | <input type="checkbox"/> | 47 |

- 14.3.28 गूठ बोलने या बातें बड़ा बड़ा कर कहने की आदत है ?
- 14.3.29 अपने और भविष्य के बारे में सदैव आशावादी रहा है ?
- 14.3.30 उसमें दबाव से जुझने की क्षमता है ?
- 14.3.31 कृतज्ञता, विश्वासनीयता और अवलम्बन के योग्य चरित्र उसमें शामिल है ?
- 14.3.32 निष्पक्ष होने में स्वतन्त्र और स्वयंनिर्भरता की लक्षण है ?

अपने विचार में सींगी के व्यक्तित्व का वर्णन यदि आप लिखना चाहें तो लिख सकते हैं :

Card 17

- 14.3.28 Have a tendency to exaggerate facts or confabulate? 48
- 14.3.29 Appear to be always optimistic and hopeful about the future? 49
- 14.3.30 Show a very marked capacity to endure stress? 50
- 14.3.31 Show dependability, loyalty, and reliability in social relations? 51
- 14.3.32 Demonstrate marked independence and autonomy in judgements and decisions? 52

Please write in a brief narrative of your impressions of the patient's premorbid personality (optional):

ਮੈਰਿਟਿਮ ਅਤੇ ਵਯਕਤਿਗਤ ਇਤਿਹਾਸ ਮਰਯੇਤਬੁਕ

ਮੰਸਥਾ ਦਾ ਨਾਂ :

ਠੰਗੀ ਦਾ ਨਾਂ :

ਠੰਗੀ ਦਾ ਬਿਲੀ ਨੰ :

ਠਾਕਿਲੇ ਦੀ ਤਰੀਕ

ਮੈਰਸ਼ਲ

ਜਾਂ 9

ਨਗੀ 2

ਕਿਸ ਮੈਰਸ਼ਲ ਤੇ ?

4 = 9

2 = 2

3 = 3

ਭੂ = ਭੂ

36 = ~~35~~ 4

37 = 7

ਮੈਟਰ ਅਤੇ ਪ੍ਰੋਜੈਕਟ ਨੰ

ਠੰਗੀ ਨੰ

ਸੂਚਣਾ ਵੇਖੋ ਠਾਕੇ ਦਾ ਨੰ

ਨੰ

ਮਰਯੇਤਬੁਕ ਨੰ

ਮੈਰਿਟਿਮ ਅਤੇ ਵਯਕਤਿਗਤ ਇਤਿਹਾਸ ਮਰਯੇਤਬੁਕ ਵਿੱਚ

ਨੰ (ਖਾਲੀ ਛੱਡ ਦਿਉ)

WHO Collaborative study on
Determinants of Outcome
Severe Mental Disorder

PSYCHIATRIC AND PERSONAL HISTORY SCHEDULE

Name of facility _____

Patient's first name of initials _____

Identification number of patient
in the facility _____

Date of admission

--	--	--	--	--	--

Section

--

Y = 1
No = 0

Type of Section

--

4 = 1
2 = 2
3 = 3
5 = 4
36 = 5
37 = 7

Centre/Project No.			1, 2	
Subject/Patient No.				3, 4, 5
Respond. Type No.			6	
Ethnicity ID No.			7, 8	
Schedule No.	0	5	9, 10	

Card 1

Cols.

Psychiatrist who made this assessment
Name (leave blank) _____

--	--	--

 11, 12, 13

2

ਦੀ ਏ ਸੈਂਟਰਲ ਪ੍ਰਮਾਣਿਕਤਾ ਲਈ ਸੀਤਾ ਗਿਆ ਕੀ?

0 ਨਹੀਂ

1 ਹਾਂ। ਭਰਵੇਂ ਟਾਕੇ ਨੇ ਇੰਟਰਵਿਊ ਸੀਤਾ

2 ਹਾਂ। ਭਰਵੇਂ ਟਾਕੇ ਇੰਟਰਵਿਊ ਵਿਚ ਗਏ ਅਤੇ
ਘਰ ਇੰਟਰਵਿਊ ਨਹੀਂ ਸੀਤਾ

ਮੈਂਬਰਸ਼ਿਪ ਤਮਕ ਨਿਠੇ ਇੰਟਰਵਿਊ ਸੀਤਾ?

ਨਾਂ

ਰੋਗੀ ਦਾ ਤਕਲਾਫ਼ ਮੈਂਬਰਸ਼ਿਪ ਨਹੀਂ

ਤਰੀਖ਼ ਜਦੋਂ ਫਾਰਮ ਭਰਿਆ ਗਿਆ?

ਰੋਗੀ ਦਾ ਫਿੰਗਰ ਮਰਦ = 1 ਔਰਤ = 2

ਰੋਗੀ ਦੀ ਉਮਰ

ਸੂਚਨਾ ਦੇ ਤੌਰ ਸਰੋਤ ਨਿਸ਼ਚਿਤ ਕਰੋ ਸੂਚਨਾ ਕੌਰੀ ਸੀਤੀ ਗਈ?

0 ਨਹੀਂ 1 ਹਾਂ 2 ਭਰਵੇਂ ਨਹੀਂ ਜਾਂ ਪ੍ਰਤਿਰੂਪ

ਰੋਗੀ ਨਾਲ ਇੰਟਰਵਿਊ

ਸੂਚਨਾ ਦੇਣ ਵਾਲੇ ਨਾਲ ਇੰਟਰਵਿਊ

ਇਹ ਤੋਂ ਨਿਸ਼ਚਿਤ ਸੂਚਨਾ ਦੇਣ ਵਾਲੇ ਨਾਲ ਇੰਟਰਵਿਊ

Was this schedule filled in as part of a reliability interview?

14

- 0 = No
- 1 = Yes, the person who filled in this schedule also interviewed the patient
- 2 = Yes, the person who filled in this schedule was present during the interview but did not interview the patient himself

Psychiatrist who interviewed the patient

15, 16, 17

Name (leave blank) _____

Patient's WHO number

18, 19, 20

Date when this form was filled in

21, 22, 23, 24, 25, 26

Sex of patient

- 1 = Male
- 2 = Female

27

Age of patient

28, 29

Sources of information to fill in this form

- 0 = No
- 1 = Yes
- 8 = Not applicable

Interview with the patient

30

Interview with a key informant

31

Interview with more than one informant

32

ਪਿਛਲੀ ਕਾ ਗੁਣ ਦੇ ਸ਼ਬਦਾਂ ਦੇ ਸਾਗਰ

ੳਰ ਲਿਖਿਤ ਸੁਭਾ

ੳਰ ਸਰੋਤ

ਜੇ ਸੁਭਾ ਸ਼ਾਬ ਸਾ, ਈਟਰਇਜ਼ ਓਇਆ ਤਾਂ ਓਗੀ ਸਾ
ਜੀ ਲਿਖਿਤਏਗੀ ਜੀ ?

- ੦ ਮਾਤਾ
- ੧ ਖਿਤਾ
- ੨ ਖਾਂਡ / ਖਤਰੀ
- ੩ ਕੂਜੇ ਘਰ ਟਾਲੇ
- ੪ ਮਿਤਰ / ਸੇਠੀ
- ੫ ਓਰ ਓਈ ਧੂਗ ਲਿਖੋ
- ੬ ਖੂਡੇ ਕੂਲ

ਖਤਾ (ਜੇ ਓਗੀ 'ੳ' ਅਲਗ ਓਗੇਂ ਗੁ)

ਜੇ ਲਿਖੇ ਓਰ ਸੁਭਾਸ਼ਾਬ ਸਾ, ਈਟਰਇਜ਼ ਓਇਆ ੳ ਤਾਂ ਲਿਖੋ:

ਓਗੀ ਸਾ, ਲਿਖਿਤਾ

ਲਿਖੀ ਫੁਗਾਉ ਗੰਠਆ

ਪਿਛਲੇ ਤਿਓ ਮਸੀਕਿਆਂ ਵਿਖ

੦ ਘੱਟ ਜਾਂ ਸਗੀ'

੧ ਮਯੰਮ

੨ ਲਿਖਾਰਾ

Case notes from previous or current admission 33

Other written documents (specify _____) 34

Other sources (specify _____) 35

If a key informant was interviewed, specify:

(Note:- a key informant is a person who has been in daily or almost daily face-to-face contact with the patient)

Relationship to patient 36

- 0 = Mother
- 1 = Father
- 2 = Spouse
- 3 = Other person living in the same household as patient
- 4 = Friend
- 5 = Other (specify _____)

8 = not applicable, no key informant available

Address (if different from patient's) _____

If other informants (not qualifying as key informants) were interviewed, specify:

Relationship to patient

Intensity of contact with patient in last three months
0 = low 1 = medium 2 = high or none

1.	
2.	
3.	
4.	
5.	

ਜਗਤ ਕਿਥੇ ਫਿਟਰਵਿਯੁ ਕੀਤਾ ਜਾਵਿਆ?

- ੦ ਰਿਸ਼ਠਕ ਸੈਂਟਰ ਜਾਂ ਠਮਪਤਾਲ,
- 1 ਰੋਗੀ ਜਾਂ ਸੁਖਲਾਵਾਤਾ ਨਾ ਘੱਰ
- 2 ਓਰ ਨਾਗ
- ੪ ਖੂਤਿ ਕੁਲ ਕੀਤਾ

ਫਿਟਰਵਿਯੁ ਦਾ ਖਰਿਕੇ

ਮੈਂ ਵਿਚ ਕੰਮ ਕਰਦਾ ਹਾਂ। ਕਰਦੀ
 ਹਾਂ। ਮਨਸੀਂ ਮਾਸਿਰ ਸਵਾਸਥ ਵਿਚ ਰਿਸ਼ਠਕ ਕਰ ਛੇ ਹਾਂ ਤਾਂ ਕਿ
 ਮਰੀਜ਼ਾਂ ਨੂੰ ਉੱਤਮ ਸੇਵਾ ਖੂਦਾ ਕਰ ਸਾਂਕਏ। ਮੈਂ ਤੁਹਾਡੇ ਮਾਪਣੇ
 ਜਾਂ ਕੀ ਸੇਵਤ ਥਾਏ ਕੁਝ ਸਵਾਲ ਕਰਨਾ ਚਾਹਦਾਂ। ਖਾਸੀਂ
 ਹਾਂ। ਇਹ ਸਵਾਲ, ਖਿਠਲੇ ਸਲਾਹ ਅਤੇ ਖਰਿਕਾਰ ਦੇ ਥਾਏ ਹੀ ਹੁਣ
 ਮੈਂ ਇਹ ਕੋਹਗਣਾ ਕਾਂਗਣ। ਖਾਸੀਂ ਹਾਂ ਕਿ ਇਹ ਸਾਂਕਿਸ ਦੀ
 ਰਿਸ਼ਠਕ ਤੇ ਤੇ ਮੈਂ ਕੁਝ ਵੀ ਤੁਸੀਂ ਕੁਸੇਗੇ ਬਿਲਕੁਲ ਠੀਕ
 ਰਹੇਗਾ ਤੇ ਇਹ ਕਿਸੇ ਵੀ ਸਰਕਾਰੀ ਜਾਂ ਮਾਏਕਾਰਿਕ
 ਖੂਮਾਣ ਨਾ ਹਿੱਸਾ ਕੀਂ ਓਵੇਗਾ।

ਫਿਟਰਵਿਯੁ ਕਰਨ ਵਾਲਾ ਇਹ ਖਰੋ ਕਰੇ ਕਿ ਇਹ ਖਰਿਕੇ ਖੂਰੀ ਤਰਾ
 ਸਮਝ ਲਿਤਾ ਗਿਆ ਤੇ ਤੁਹੀਂ ਹੀ ਮਾਗਿਆ ਮੈਂ ਕੇ ਮਾਠੇ ਕਏ।

ਫਿਟਰਵਿਯੁ ਕੇ ਹਰ ਫਿਕਾਰ ਨਾ ਕਾਰਣ ਕਏ ਲਿਖੋ:

ਰੋਗੀ ਜਾਂ ਉੱਚੇ ਸੁਖਲਾਵਾਤੀ ਦੇ ਫਿਕਾਰ ਦਾ ਕਾਰਣ:

Locality where main interview with informants/patient took place:

37

- 0 = At research or hospital facility
 1 = Patient's or informant's home
 2 = Other (specify _____)
 8 = Not applicable

INTRODUCTION TO INTERVIEW

The investigator should first introduce himself/herself and thank the informant (or patient) agreeing to see the interviewer. The purpose of the interview should be explained briefly in approximately the following terms:-

"I work for... (Name of Institution or facility). We are now carrying out a scientific investigation about mental health problems with the aim of learning how to provide better medical care to people. I want to ask you a number of questions about your/X's health, about your/his/her past life, and about the family in general. I want to repeat that this is a scientific investigation and to assure you that everything you tell us about your/X will be treated confidentially and will not appear on any official records".

The investigator should satisfy himself that the informant (or patient) has understood these introductory words, and asked for the subject's explicit consent to proceed with the interview.

In every case of refusal of the interview, a note should be entered in the space provided below:

REASONS FOR INFORMANT'S (OR PATIENT'S) REFUSAL OF INTERVIEW

ਪਾਠਨਾ ਨਿਸ਼ਾ : ਮਾਸਿਕ ਰੋਗ ਦਾ ਇਤਿਹਾਸ

ਹਸਪਤਾਲ, ਜਾਂ ਇਸ ਮੰਸਕਾ ਵਿਚ ਆਣ ਦਾ ਹੀ ਕਾਰਣ ਸੀ? ਹੁਣ ਕਿਉਂ? ਹੀ ਸਿਫ਼ ਇਹੀ ਵਕਾਰ ਸੀ? ਕਿਸੀ ਗੰਭੀਰ ਸੀ? ਸਭ ਤੋਂ ਮਹਤਵਪੂਰਣ ਕਾਰਣ ਹੀ ਸੀ? ਕੋਈ ਉਹ ਵਕਾਰ? ਘਟਣਾ ਅਤੇ ਉਹ ਤਰੀਕੇ ਦੀ ਖੂਬੀ ਤਰਹ ਇਤਿਹਾਸ ਕੋਲ ਹੀ ਕੋਸਿਸ਼ ਕਰੋ?

ਇਸ ਵਾਕਿਫ਼ੇ ਜਾਂ ਗਠਰੀ ਕਈ ਕਿਤੇ ਕਾਰਣਾਂ ਦੀ ਵਕਾਰ ਲਿਖੋ?
(ਨਿਸ਼ੇਂ ਹੀ ਜ਼ਰੂਰੀ 'ਤੇ ਕੋ)

0 = ਨਹੀਂ । 1 = ਹਾਂ 8 = ਕੋਈ ਸੂਰਣਾ ਨਹੀਂ 9 = ਮਾਸਿਕ

- 1.1.1. ਮਾਤਮ ਗੋਤਿਆ ਜਾਂ ਕੁਰ ਨੂੰ ਨੁਕਸਾਨ ਕਰਣ ਦੀ ਕੋਸਿਸ਼
- 1.1.2. ਰੋਗੀ ਦਾ ਇਹਗਰ ਮੰਗਾਇਤ ਖਤਰਾ ਬਣ ਸਕਦਾ ਤੋਂ ਖਾਸਕਰ ਅਖਈ ਸੇਹਤ ਦਾ (ਨਿਫੇਂ ਕੋਈ ਨਾ ਖਾਣਾ ਜਾਂ ਮਾਤਮ ਗੋਤਿਆ ਕੀਆਂ ਗਏ)
- 1.1.3. ਕਿਸੇ ਤੋਂ ਹਮਲਾ ਜਾਂ ਕੋਟ ਖ਼ਜਾਈ (ਅੱਗੋਂ ਖ਼ਾਣਾ ਜਾਂ ਜਾਨ ਮਾਲ ਦਾ ਨੁਕਸਾਣ)
- 1.1.4. ਵੁਜ਼ਿਆਂ ਦੇ ਇਕਾਰ ਵਿਚ ਮਰੀਜ਼ ਤੀਹ ਕਰਣ ਵਾਲਾ ਜਾਂ ਕਮਰੀ ਦੇਣ ਵਾਲਾ
- 1.1.5. ਮਜ਼ੀਬ ਉਹ ਤਰੀਕੇ ਦੀ ਸੁਰੁਆਤ ਜਾਂ ਵਧਾਵਾ (ਨਿਫੇਂ ਕਿਆਵਾ ਮਾਲਗਾਵ ਜਾਂ ਉਤੇਜਨਾ, ਵਿਚ ਨਾ ਲਗਣਾ, ਕੋਮਕਾਨ ਕੋੜ ਦੇਣਾ)
- 1.1.6. ਸ਼ਰੀਰੀ ਬਿਮਾਰੀ ਜਾਂ ਕੋਟ ਦੇ ਲੱਖਣ

PART 1. PSYCHIATRIC HISTORY

Card 1

"What, if anything, happened to make it necessary for X to come (to be brought to...) (Specify the hospital, clinic or other facility) at this particular time?" Cross-examine: "Was that the only reason?" "How serious was that?" "Which was the most important reason?" "Was there anything else?" Try to obtain a description of behaviour or of an event if such has occurred. (The mode or agency of referral is not rated here but in item 1.6)

1.1 RATE MAIN REASONS FOR CURRENT ADMISSION OR ATTENDANCE ACCORDING TO INFORMANT (rate as many as applicable).

0 = No
 1 = Yes
 8 = Not applicable or no information
 9 = Uncertain

- | | | | |
|-------|---|--------------------------|----|
| 1.1.1 | Patient <u>attempted</u> suicide or bodily harm | <input type="checkbox"/> | 38 |
| 1.1.2 | Patient's behaviour perceived as <u>potential</u> danger to himself (e.g. talked of killing or harming himself; refusal of food, etc). | <input type="checkbox"/> | 39 |
| 1.1.3 | Patient <u>committed</u> an assault, or other violent or hazardous act (e.g. setting fire or destroying property) | <input type="checkbox"/> | 40 |
| 1.1.4 | Patient's behaviour perceived by others as <u>threatening</u> or grossly annoying | <input type="checkbox"/> | 41 |
| 1.1.5 | <u>Onset or exacerbation</u> of odd behaviour, appearance or talk (e.g. excitement or withdrawal, self-neglect, incoherent talk, bizarre ideas, loss of interest or abandoning work, wandering, marked anxiety or fears, etc) | <input type="checkbox"/> | 42 |
| 1.1.6 | Patient developed signs of <u>physical illness</u> or sustained an <u>injury</u> | <input type="checkbox"/> | 43 |

1.1.7 ਘਰ ਵਿਚ ਕੋਈ ਸਮਝਿਆ (ਜਿਵੇਂ ਕਿਸੇ ਰਿਸ਼ਤੇਦਾਰ ਦੀ ਬਿਮਾਰੀ, ਘਰ ਬਦਲਣਾ, ਘਰ ਵਿਚ ਜ਼ਨਿਮ)

1.1.8 ਕੋਰ ਆਧ ਕਈ ਭੋਜਨਿਆ ਗਿਣਿਆ ਸੀ

1.1.9 ਆਪਣੇ ਆਪ ਸਲਾਹ ਕਈ ਜਾਂ ਦਾਖਿਲੇ ਕਈ

1.1.10 ਤੋਰ ਵਜਾ?

1.2 ਤੁਸੀਂ ਦਸਿਆ ਤੇ ਕਿ ਤੁਸੀਂ। ਤੁਹਾਡੇ..... ਕਿਸ ਵਜਾ ਕਈ ਆਏ ਹਨ। ਖਿਠਲੇ ਇਕ ਸਾਲ ਵਿਚ ਇੰਨਾ ਨੂੰ ਸੀ ਉਦਿਆ ਤੇ ਤੇਂ ਉਸ ਦੀ ਖੁੱਛੇ ਸਫ਼ੇ ਕਰਨਾ ਖੁਸ਼ੀਆਂ। ਪਾਸੀਂ ਤਾਂ। ਸਭ ਤੋਂ ਪਹਿਲਾਂ ਕੋਈ ਤੁਹਾਡੇ ਵਿਚ, ਵਿਚ ਇਹ ਸਫ਼ੇ ਆਈ ਸੀ ਇੰਨੀ ਦਾ ਤੋਰ ਤੁਹਾਡੇ ਬਕਾਲਿਆ ਤੇ ਅਤੇ ਆਪਣੇ ਆਪ ਜਿਹਾ ਬਰਤਾਵ ਸੀ ਕਰ ਰਿਹਾ ਤੇ। ਸੀ ਤੋਰ ਸੁੱਕਾਂ ਨੇ ਵੀ ਇਹ ਸੁੱਟ ਸੀਤਾ ਸੀ?

ਸੁੱਚਣਾ ਦੇਣ ਵਾਲੇ ਨੂੰ ਸੁੱਚਣ ਦਾ ਸਮਾਂ ਕਿਉਂ ਤੇ ਠਿਹ ਖੁੱਛੇ:

ਸੀ ਉਸ ਤੋਂ ਪਹਿਲਾਂ ਕੋਈ ਬਦਲਾਉ ਸੀ? ਉਸ ਤੋਂ ਬਾਦ?

ਉਸ ਘਟਣਾ ਤੋਂ ਪਹਿਲੇ ਜਾਂ ਬਾਦ ਵਿਚ? ਪਾਸੀ ਘਟਣਾ ਦਾ ਵਰਤਾਵ ਹੈ:

1.2. ਸਭ ਤੋਂ ਪਹਿਲੇ ਬਦਲਾਵ ਦੀ ਤਰੀਖ ਵ ਸੁਰੂਆਤ

1.3 ਇੰਨੀ ਘਟਣਾਵਾਂ ਦੇ ਸੁਰੂਆਤ ਦਾ ਸਮਾਂ

1.1.7 Recent change of crisis in family or household necessitating contact without change of patient's condition (e.g. illness of a household member, rehousing, birth of a child, death of a household member, somebody getting married, etc) 44

1.1.8 Patient was referred for a routine checkup by a doctor or other health worker, or by an agency (e.g. school, driving licence authorities, etc) 45

1.1.9 Patient himself has requested admission or an appointment to see a doctor or other health worker because of complaints about his mental health (other than problems listed above) 46

1.1.10 Other reason (specify _____) 47

1.2 "You have already told me about the reason why X had to come to/hospital, clinic, etc. - as relevant/ at this point in time, and about the kind of problems he has now. I should like now to ask you about things which happened in the past, mainly in the last year and maybe even earlier. What was it that made you aware for the first time ever that X was not behaving like his usual self? Did other people notice anything unusual about X's behaviour around that time; or maybe even earlier that you did?

Allow for informant to think and reply, then cross examine: "Was there nothing of the sort before that? Did that happen before or after.../use as a reference point in time a fact that the informant has already mentioned, or an event which should be locally known/ ?" Write down a narrative note, in informant's own words, on first ever abnormality that he recollects, and its approximate timing:

1.2 PROBABLE EARLIEST MANIFESTATION OF PATIENT'S ABNORMALITY PERCEIVED BY INFORMANT OR OTHERS

----- 48, 49, 50

1.3 TIMING OF ABOVE EVENTS APPROXIMATE NUMBER OF MONTHS AGO (999 if unknown) 51, 52, 53

1.4 ਮੇਂ ਹੁਣ ਕੁਝ ਤੋਰ ਕੀਜਾਂ ਦੇ ਬਾਰੇ ਖੁਛਾਂਗਾ। ਖੁਛਾਂਗੀ ਜਿਸੀ ਦੀ ਵਜਹ ਸਭ ਤੁਹਾਡੇ ਪਰਿਵਾਰ ਜਾਂ ਤੁਹਾਡੀ ਠੋਗੀ ਦੇ ਬਾਰੇ ਚਿੰਤਾ ਛੱਡੀ ਤੋਏ। ਠੋਗੀ ਨੂੰ ਸੀ ਮਾਸੂਮ ਤੋਇਆ ਸੀ (ਘਟਣਾ ਤੋਂ ਪਹਲੇ ਜਾਂ ਖਾਣ ਵਿਚ ਸ਼ੈ 1.2 ਵਿਚ ਖੁੱਛੀ ਜਾਂ ਖੁੱਛੀ ਤੋਂ)। ਇੰਟਰਵਿਊ ਕਰਨ ਵਾਲੇ ਨੂੰ ਠੋਰ ਬਿਸਟ ਤੋਂ ਖੁਛਿਆ ਜਾਏ। ਜੇ ਜਵਾਬ ਤੋਂ ਵਿਚ ਤੋਏ ਤਾਂ ਪਹਲੀ ਵਾਰ ਕੋਂ ਤੋਇਆ ਦੇ ਬਾਰੇ ਚੁੱਪੀ ਤਰਾ ਜੀਬ ਖੜਤਾਏ, ਕੀਤੀ ਜਾਏ। ਇਸ ਤੋਂ ਖਾਣ ਅਪਣੇ ਹਿਸਾਬ ਸਭ ਸਮੇਂ ਦੀ ਗਣਨਾ ਕਰੋ।

1.4.1-1.4-86 ਜੇ ਠੋਗੀ ਜਵਾਬ ਦੇ ਰਿਹਾ ਤੋਂ ਤਾਂ ਚੁੱਪੀ ਤਰਾ ਜੀਬ ਖੜਤਾਏ।

1.4 ਪਹਲੀ ਮਾਸਾਯਰਣਤਾ ਦਾ ਪਰਿਚੈ

ਸੀ ਨੇਂ ਖਿਛਏ, ਏਲੇ ਇਸੀ ਤਰਾ: 0 ਨਹੀਂ
 1 ਜਾਂ
 9 ਮਾਸਿਸਿਸਿਤ

1.4(1) ਘਰੇ ਜਾਂ ਕੋਸ ਵਿਚ ਕੋਰ ਦੀ ਕਮੀ?

1.4(2) ਲਗਾਤਾਰ ਕੁਝਿਆਂ ਤੋਂ ਖਚਾਉ ਜਾਂ ਗਵ, ਘਾਤ ਖੰਦ?

1.4(3) ਸਕਲ ਸੁਰਤ ਅਤੇ ਸਫਾਈ ਵਿਚ ਕੋਰ ਨਹੀਂ?

1.4(4) ਕੁਝ, ਕੋਰਸ ਜਾਂ ਸੀਨੇ ਦੀ ਕਮੀ?

1.4(5) ਕਈ ਦਿਨ ਤੇਜ਼ ਠੰਡਾ ਅਤੇ ਨਵੇਂ ਕੋਰ ਕਰਨੇ ਠੰਡਾ?

1.4(6) ਕੁਝਿਆਂ ਤੋਂ ਸਕਲ ਕਰਣਾ?

- 1.4(7) ਆਤਮਗੋਤਿਆ ਜਾਂ ਖੁਦ ਨੂੰ ਨੁਕਸਾਨ ਦੀ ਕੋਸ਼ਿਸ਼ ?
- 1.4(8) ਆਲ ਨੂੰ ਨੁਕਸਾਨ ਪਹੁੰਚਾਣਾ ਜਿਵੇਂ ਆਂਠ ਲਗਾਣਾ ?
- 1.4(9) ਬਿਨਾਂ ਵਜ਼ਰ ਮੁਲਕ ਦੇ ਦੂਜੇ ਹਿੱਸੇ ਵਿਚ ਬਣੇ ਜਾਣਾ ?
- 1.4(10) ਅਫ਼ੀਰ ਜਾਂ ਗੁਰਦੁਆਰੇ ਵਿਚੋਂ ਘੱਟੋ ਘੱਟ ਲਗਾ ਦੇਣਾ ਜਨਾਂ ਵਿਚ ਘੱਟਾਂ ਵੱਧੀ ਵਿਲਕਸਥੀ ਨਹੀਂ ਸੀ ?
- 1.4(11) ਬਿਨਾਂ ਵਜ਼ਰ ਗੁੱਸੇ ਜਾਂ ਲੜਾਈ ਕਰਨਾ ?
- 1.4(12) ਬਿਨਾਂ ਜ਼ਿੰਮੇਵਾਰੀ ਜ਼ਿਆਦਾ ਖੋਸਾ ਖਰਚਣਾ ?
- 1.4(13) ਬਿਨਾਂ ਜ਼ਿੰਮੇਵਾਰੀ ਅਮੀਗਤ ਬਰਤਾਉ ਕਰਨਾ ?
- 1.4(14) ਉੱਚ ਜਜ਼ੂਆ ਜਨਾਂ ਕਰਨਾ ਤਾਂ ਕਿ ਵੱਧੀ ਨ ਸਮਝ ਸਕੇ ਸੀ ਕੋਈ ਕੀ ਕਰ ਰਿਹਾ ਤੇ ?
- 1.4(15) ਇਸ ਤੋਂ ਜ਼ਿਆਦਾ ਖੋਸੇ ਤੇ ਇਸ ਤਰਾ ਟੁੱਟਾਵ ਕਰਨਾ ਜਿਵੇਂ ਉਹ ਅਵਜ਼ਾਂ ਸੁਣ ਰਿਹਾ ਤੇ ਜਨਾਂ ਵਿਚ ਆਸ ਖਾਸ ਵੱਧੀ ਨਾ ਤੁੰਦੇ ?
- 1.4(16) ਇਸ ਤਰੀ ਕਰਨਾ ਕੀ ਵੱਧੀ ਉੱਚਾ ਖਿੱਚ ਕਰ ਰਿਹਾ ਤੇ ਤੀ ਕਰ ਰਿਹਾ ਤੇ ਜਾਂ ਕੋਸ਼ਿਸ਼ ਕੇ ਰਿਹਾ ਤੁੰਦੇ ?
(ਇੰਟਰਵਿਊ ਕਰਨ ਵਾਲੇ ਨੂੰ ਸਖ਼ਾਨ ਵਿਚਾਰਾਂ ਨਾਫ, ਜਾਣਕਾਰ ਤੁੰਦੇ ਅਤੇ ਪਤਾ ਤੁੰਦੇ ਕਿ ਸਰ, ਵਜ਼ਰ ਜਾਂ ਉੱਚਾਵ ਨੂੰ ਇਸ ਤਰਾਂ ਪਕਾਇਆ ਜਾ ਰਿਹਾ ਤੇ)

- | | | | | | | |
|----------|---|--------------------------|--------------------------|--------------------------|--------------------------|-------|
| 1.4 (7) | Attempt to harm or kill himself? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 21-24 |
| 1.4 (8) | Cause damage to property, e.g. destroy things or set fire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 25-28 |
| 1.4 (9) | Go away suddenly to another part of the country without giving good reason for doing so? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 29-32 |
| 1.4 (10) | Spend many hours in a church or a temple when formerly he used to spend much less time there? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 33-36 |
| 1.4 (11) | Get very irritable, quarrelsome or angry for days or weeks without sufficient reason? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 37-40 |
| 1.4 (12) | Spend money in a wild and irresponsible fashion, quite unlike his former self? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 41-44 |
| 1.4 (13) | Do anything inappropriate, indecent or annoying that would upset many people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 45-48 |
| 1.4 (14) | Talk incomprehensively, so that no one could understand what he wanted to say? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 49-52 |
| 1.4 (15) | Behave on more than one occasion as if hearing voices when no one around was actually talking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 53-56 |
| 1.4 (16) | Say that he was being persecuted, harmed, or bewitched by other people?
(Interviewer should fill in popular local contents of paranoid ideation) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 57-60 |

Card 2

- | | | | | |
|----------|--|--------------------------|--|-------|
| 1.4 (17) | Look very frightened or anxious for days or weeks without good reason? | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 61-64 |
| 1.4 (18) | Claim unlikely or impossible things, for example that God was talking to him, or people could read his thoughts, or everybody was talking about him, or people being not what they appeared to be, etc?
(Interviewer should fill in local contents of delusional beliefs) | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 65-68 |
| 1.4 (19) | Look very sad, mournful or hopeless? | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 69-72 |
| 1.4 (20) | Say that he had lost his memory for a time so that he did not know where he was and what he was doing? | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 73-76 |

Card 3

Cols.

- | | | | | |
|----------|--|--------------------------|--|-------|
| 1.4 (21) | Talk about somebody who is dead as if that person was still alive? | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 21-24 |
| 1.4 (22) | Act as if he could not get a particular thought out of his head? | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 25-28 |
| 1.4 (23) | Complain persistently of various aches, pains or funny sensations in his body or head? (Interviewer should fill in popular local contents of morbid pre-occupations with own body) | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 29-32 |
| 1.4 (24) | Think he was suffering from an incurable illness while doctor (or other health worker) had said that nothing was wrong with his health? | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 33-36 |

1.4 (25) ਅਪਣੇ ਗੁਣਿਕ ਬਾਰੇ ਕੁਝ ਵੀ ਸੀਮਾ ਘੋਸ਼ਣਾਵਾਂ
 ਬਣਾ ਕੇ ਸਿੱਧਾ ਤੇ ਸਿੱਧੀ ਤੇ ਵਾਸਤਵਿਕਤਾ ਨਾਲ ਕੋਈ
 ਸਬੰਧ ਨਹੀਂ ?

1.4 (26) ਕੋਈ ਇਸ ਤਰ੍ਹਾਂ ਅਸਾਧਾਰਣ ਗੱਲ ਸੀਤੀ ਤੇ
 ਨਾ ਹੋ ਸਕੇ ਤੇ ਸੋ ਸੋ ਨਹੀਂ ਖੁੱਛੀ? ਜੇ ਕੋਈ ਇਸ
 ਤੇ ਵਰਣ (ਬਣਾਣ) ਨਹੀਂ ਕਰੇ ਤੇ ? ਉਦਾਹਰਣ
 ਦਿਓ ।

1.4 (27)

1.4 (28)

1.4 (29)

- 1.4 (25) Talk about great new plans he had for the future in a way he had never done before? 37-40

- 1.4 (26) Do or say anything else out of the ordinary which I have not mentioned so far? Can you describe it and give me an example?

 41-44

- 1.4 (27) -----
 45-48

- 1.4 (28) -----
 49-52

- 1.4 (29) -----
 53-56

1.5 ਤੁਸੀਂ ਮੈਨੂੰ ਦਸਿਆ ਤੇ ਰਿ ਰਾਹੀਂ ਇਸ ਦਸਿਆਂ ਵੀ
 ਅਜੀਬ ਅਤੇ ਅਮੀਤ ਗਲਾਂ ਦਸਿਆਂ ਤੇ ਨਿਸਰੀ ਵਜਾ ਸਾਲ
 ਤੁਸੀਂ ਅਗਸੂਮ ਤੇਇਆ ਤੇ ਰਿ ਉਹ ਬਦਲ ਗਏ ਤੇ। ਇਹਦੇ
 ਖਾਰੇ ਮੋਚ ਤੇ ਦਸ ਸਰਦੇ ਤੇ ਰਿ ਇਹ ਬਦਲਾਉ ਅਥਾਨਰ
 (ਉਦਾਹਰਣ ਤੁਹ ਦਿਸਾਂ ਇਹ) ਜਾਂ ਤੇਲੀ ਤੇਲੀ (ਅਰੀਨੇ ਜਾ
 ਤਫਤੇ ਇਹ) ਤੇਇਆ? ਇੰਟਰਇਸ਼ੁ ਰਬਟ ਵਾਲੇ ਨੂੰ ਖਾਜੀਦਾ ਤੇ
 ਰਿ ਰਿਸੀਂ ਘਰਣਾ ਨੂੰ ਉਦਾਹਰਣ ਦੇ ਵੇ ਜੀਚ ਪੜਤਾਲ ਕਰੇ।

- 1.5. ਸੂਚਨਾ ਦੇਣ ਵਾਲੇ ਦੇ ਵਿਚਾਰ ਵਿਚ ਰੋਗੀ ਦੀ ਤਰਲੀਠ ਵੀ
 ਸੁਰੂਆਤ ਕਰੋ ਤੇਈ? ਇਹ ਸਵਾਲ ਨੂੰ ਸੂਚਤ ਕਰੋ :
- 1 = ਅਥਾਨਰ ਸੁਰੂਆਤ (ਤਫਤੇ ਤੇ ਘਟ ਸੁਰੂ ਤੇਈ) ਕੋਈ
 ਲੱਖਣ ਪਾਏ ਲੀਂ ਸੀ।
 - 2 = ਅਥਾਨਰ ਸੁਰੂਆਤ ਪਰ ਪਾਏ ਲੱਖਣ ਸੀ।
 - 3 = ਤਿੱਖੀ ਸੁਰੂਆਤ ਜਿਸ ਵਿਚ ਲਿਖਣ ਅਰੀਨੇ ਤੇ ਸੁਰੂ ਤੇਈ
 ਪਰ ਪਾਏ ਲੱਖਣ ਲੀਂ ਸੀ।
 - 4 = ਤਿੱਖੀ ਸੁਰੂਆਤ ਅਰੀਨੇ ਤੇ ਪਾਏ ਲੱਖਣ ਸੀ।
 - 5 = ਵੀ ਅਰੀਨੇਆਂ ਤੇ ਤੇਲੀ ਤੇਲੀ ਸੁਰੂਆਤ।
 - 6 = ਸੂਚਨਾ ਦੇਣ ਵਾਲਾ ਚਿਮਾਰੀ ਜਾਂ ਸਵਸੱਕ ਗਲਾਤ ਤੇ
 ਫਰਰ ਲੀਂ ਕਰ ਸਕਦਾ।
 - 7 = ਵਰਣਨ ਪੂਰਾ ਲੀਂ ਜਾਂ ਆਧੁਰੀ ਸੂਚਨਾ।
 - 8 = ਸਵਾਲ ਲੀਂ ਪੁਛਿਆ।

1.5 "You told me about some unusual things that X did or said, which made you think that he was not behaving like his former self. When you think of it, did this change in X develop quite suddenly, say within days, or slowly, over a longer period of time, maybe in weeks or even months? How about... /interviewer picks up examples of abnormal behaviour recorded under previous item/, did it start suddenly? Has X never before been like this/or said, done, etc./?"

1.5 RATE INFORMANT'S IMPRESSION OF MODE OF ONSET OF PATIENT'S DISORDER

- 1 = Clearly sudden onset, one or more psychotic symptoms appeared within days (up to a week); previous psychiatric symptoms can be safely excluded 57
- 2 = Precipitous onset of one or more psychotic symptoms within days, (up to a week) but previous existence of other non-psychotic symptoms likely or certain
- 3 = Acute onset, psychotic symptoms developed over a period of up to one month; previous psychiatric symptoms can be safely excluded
- 4 = Acute onset; psychotic symptoms developed over a period of up to one month; previous existence of other, non-psychotic symptoms likely or certain
- 5 = Insidious, slow incremental development of psychotic symptoms over many months
- 6 = Informant cannot draw a clear demarcation line between health and mental illness in the patient (no clear-cut psychotic symptoms described)
- 7 = Informant's description inadequate for making any judgement about mode of onset
- 8 = Question not asked

1.6 ਮਰੀਜ਼ਾਂ ਜਾਂ ਸੂਚਕ ਦੇਣ ਵਾਲੇ ਦੀ ਯਾਦ ਰਾਸ਼ਤ ਸਾਲ ਸਭ ਤੋਂ ਘੱਟ ਕਿੰਨੇ ਮਰਦ ਲਈ ਸੀ? ਉਸ ਤੋਂ ਧਾਰ? (ਖੜੋਸੀ ਜਾਂ ਟੋਸਤਾਂ ਦੀ ਮਰਦ ਨਹੀਂ ਗਿਣੀ ਜਾਵੇਗੀ)। ਸਾਰੀ ਜਗਤ ਤੋਂ ਲਈ ਮਰਦ ਘਾਠੇ ਖੁੰਢੇ। ਸਭ ਤੋਂ ਆਖਰੀ ਮੁਹਾਬ ਵਿਸ਼ ਸ਼ਾਖਸ਼ੇ ਦੀ ਮਰਦ ਦਾ ਜਵਾਬ ਦਿਓਗਾ।

1.6. ਆਲਗ ਆਲਗ ਮਰਦ ਦੇਣ ਵਾਲੀ ਜਗਤ ਦੀ ਸੂਚੀ

1	2	3	4	5	6	7

1 = ਮੈਕਸੀਕੋ ਵਿਚ ਮਰਦਾਂ ਦੀ ਯਾਦ ਰਾਸ਼ਤ ਦੇਣ ਵਾਲੇ ਸੀ

2 = ਦੂਜੇ ਡਾਕਟਰ ਜਾਂ ਸਰਖੋਸ਼ੀ ਸਟ

3 = ਲੋਮ, ਮੈਸਲ ਵਰਗੇ ਜਾਂ ਦੂਜੇ ਮਰਦ ਸੀ

4 = ਖੁੰਢੇ

5 = ਟੋਰ, ਟਰੀਮ, ਯੂਰਾਸੀ, ਤਿਥਿਆ, ਤੋਮਭਿਥੇ

6 = ਖੰਡਿਤ, ਖੁੰਢਿਤ, ਗਿਆਸੀ, ਮੁੱਲਾ, ਵਿਆਮ

7 = ਤੋਰ ਵਰਗੇ ਸੀ।

8 = ਮੈਕਸੀਕੋ

9 = ਘੱਟ ਨਹੀਂ

1.6 "Where did X/or informant/first go for help? Then where did X/or informant/next go for help?" /Interviewer continues in this matter until informant has enumerated all different sources of lay or professional help outside the household. Help from neighbours or relatives (unless they are professionally qualified) is not rated here. The last entry in the sequence of boxes below should refer to present treatment./

Note: Rate only first contacts with a particular type of helping agent. For example, a patient who made three visits to two different traditional healers, then saw a general practitioner who referred him to a psychiatrist with whom the patient had two outpatient sessions, and then hospitalization during which he was treated by another psychiatrists, should be rated 5 2 1. A contract is a transaction between patient and helping agent which leads to some actions related to the management or treatment of a problem that in the rater's judgement was part of, or associated with the patient's mental illness.

1.6 RECORD CONSECUTIVE WITH DIFFERENT HELPING AGENTS

Card 3

Cols.

1st	2nd	3rd	4th	5th	6th	7th

58-64

- 1 = Psychiatrist or other mental health professional
- 2 = General practitioner or other medical specialist (non-psychiatric)
- 3 = Nurse, other health worker, or social worker
- 4 = Police
- 5 = Traditional healer or non-allopathic practitioner (include here homeopaths, naturopaths, acupuncturists, etc. Specify _____)
- 6 = Priest or other religious person
- 7 = Other specify _____
- 8 = Unspecified (contact took place but type of agent unknown)
- 9 = Unknown

1.7 ਅਰੀਜ਼ ਅਦਰ ਫ਼ਈ ਯੋਂ ਗਿਆ ? ਸਰੋਂ ਦੀ ਖੜਕਾਏ, ਸ਼ਰੂਗੀ ਡੈ।

1.7 ਖੜਕੇ ਸੋਰਸ ਤੋਂ ਗੁਣ ਤਰ ਰਿੰਦੇ ਗੁਣੇ ਚਿਮਾਗੀ ਦੀ ਸ਼ਰੂਆਤ ਨੂੰ ਤੁਏ ?



1.8 ਉੱਗਡੇ ਖਿਆਲ, ਵਿਚ ਅਰੀਜ਼ ਨੂੰ ਦੀ ਤਰਲੀਠ ਡੈ ? ਸੀ ਵਕਾ ਦੱਸ ਸਕਦੇ ਡੈ ? ਜੀਚ ਯੋਂ । ਉੱਗਾਗੁਣੁ ਰਿਉਂ । ਖੁਰਾ ਵਰਦਰ ਲਿਖੋ ।

1.9 ਅਰੀਜ਼ ਜਾਂ ਸੁਬਰਾ ਵੇਣ ਵਾਲੇ ਦੇ ਵਿਚਾਰਾਂ ਦਾ ਵਰਦਰ :

0 = ਕੋਈ ਵਰਦਰ ਨਹੀਂ

1 = ਅਸਰਲ ਤੋਂ ਵਿਚਾਰ । ਕੋਈ ਗਲਤ ਗੱਲ ਨਹੀਂ

2 = ਕੋਈ ਗੱਲ ਤੋਂ ਖਰ ਖਾਸ ਨਹੀਂ

3 = ਆਸਰ ਰੋਗ ਦੀ ਵਕਾ ਸਮਝਿਆ

4 = ਸਰੀਰ ਰੋਗ ਦੀ ਵਕਾ

5 = ਆਤਮਰ, ਯਾਰਮਰ ਜਾਂ ਨੀਤਿਰ ਵਕਾ

6 = ਜਾਦੂ, ਟੈਣਾ, ਸੁਰਾਖ ਵਯੋਗ

7 = ਆਸਦਾਰਿਰ ਵਰਤਾਉਂ ਜਿਵੇਂ ਜਦੀ ਆਦਤ, ਚਿਸਤਰੇ ਵਿਚ ਖਏ ਗੰਠਾ, ਸੁਸਤੀ

8 = ਠੋਰ ਵਰਦਰ ਯੋ

9 = ਖੁੱਡੇ ਡੁਫ,

1.7 "When did X go for help to.../ name the first contact recorded under the preceding item/. Cross-examine using a time frame of reference familiar to the informant and estimate the number of weeks that have elapsed since first contact.

1.7 RATE NUMBER OF WEEKS SINCE FIRST CONTACT WITH A HELPING AGENCY RELATED TO CURRENT MENTAL DISORDERS

No. of weeks ago
(999 if impossible
to estimate)

65-67

1.8 "What do you believe is the matter with X?" "What do you think might have caused it?" Cross examine: "Can you tell me more about it? Could it be.../give example/? What do you think is the main problem?" INTERVIEWER SHOULD AVOID SUGGESTING POSSIBLE ANSWERS TO THE INFORMANT. Code the conceptualization which informant considers most likely. Record actual words of informant.

1.8 RATE INFORMANT'S OR PATIENT'S OWN CONCEPTUALIZATION OR NATURE OF PATIENT'S CURRENT PROBLEM

0 = No conceptualization, informant has no explanation

68

1 = Nothing wrong, problem denied

2 = Feels something is wrong but no specific problem described

3 = Problem seen as mental illness (e.g. "nerves", depression, schizophrenia, etc.)

4 = Problem seen as physical illness

5 = Problem seen as a spiritual, religious or a moral one (e.g. a "revelation", "pangs of conscience". etc)

6 = Magic, curse, taboo, etc.

7 = Unacceptable behaviour (e.g. lies in bed, won't work, poor habits, etc.) or motivation (e.g. Lazy)

8 = Other specify _____

9 = Not applicable

1.9 ਉੱਚਾਂ ਨੇ (ਜਿਵੇਂ ਡਾਕਟਰ, ਫੈਕ, ਪੀਐੱਚ ਨਾ ਘੱਟੋਂ ਖਾਹੁ
 ਫ਼ੌਰਾਂ ਨੇ) ਬਿਮਾਰੀ ਤੇ ਅਭਿਯੋਗ ਬਾਰੇ ਸੀ ਸੁਝਣਾ ਵਿੱਤੀਤ?
 ਜੇ ਵਰਣੁ ਮੇਰ, ਨ ਰਹੇ ਤਾਂ ਅਰ ਦਾ ਵਰਣੁ ਲਿਖੋ)

1.9 ਰੋਗੀ ਦੀ ਸਮਸਿਆ ਦੇ ਸਾਰਣ ਲਿਖੋ :

ਤਾਂ = 1 ਨਾਂ = 0

ਜੇ ਖਾਹੀ ਖੋਟਾਂ ਨਾਲ ਅਮਪਰ ਨੀਂ ਤੋੜਿਆ ਤਾਂ 8 ਤੋਂ,

1.9.1. ਕੋਈ ਸੁਝਣਾ ਨੀਂ ਵਿੱਤੀ

1.9.2. ਸਮਿਆ ਦੀ ਕੋਈ ਜੱ ਨੀਂ ਨਾ ਵਿੱਤੀ

1.9.3. ਕੋਈ ਜਲਤੀ ਦੱਸੀ ਘਰ ਖੁਰਾ ਵਰਣੁ ਨੀਂ

1.9.4. ਮਾਸਿਰ ਰੋਗ

1.9.5. ਸ਼ਰੀਰੀ ਰੋਗ

1.9.6. ਮਾਤਿਮਿਰ, ਘਾਹਿਮਿਰ ਨਾਂ ਨੇੜਿਰ ਸਾਰਣ

1.9.7. ਸ਼ਾਦ੍ਰ, ਸ਼ਾਘ, ਟੋੜਾ ਵੱਗ

1.9.8. ਅਮਦਾਰਿਰ ਵਰਤਾਉ ਸੀ ਵਜਰ ਨਾਲ,

1.9.9. ਉੱਚ ਲਿਖੋ.....

1.9 "What has... /psychiatrist, other doctor, healer, priest, social worker, or anyone else outside the family involved in the management of the present problems of the patient/told you is the matter with X?" (Try to assess if conflicting opinions and advice were given by different persons; id so, rate as many explanations as relevant)

1.9 RATE EXPLANATION OF NATURE OF PATIENT'S PROBLEM AS GIVEN TO INFORMANT OR PATIENT BY OUTSIDE AGENCIES

0 = No .
1 = Yes

If no outside agencies involved up to the present moment, fill in 8's

1.9.1	No explanation given	<input type="checkbox"/>	69
1.9.2	Was told nothing was wrong, problem denied	<input type="checkbox"/>	70
1.9.3	Was told something was wrong but no specific nature of the problem outlined	<input type="checkbox"/>	71
1.9.4	Mental illness (e.g. "nerves", depression, schizophrenia, etc)	<input type="checkbox"/>	72
1.9.5	Problem explained in terms of physical illness or illness or physical/mental interaction	<input type="checkbox"/>	73
1.9.6	Problem explained in spiritual, religious or moral terms	<input type="checkbox"/>	74
1.9.7	Magic, curse, taboo, etc	<input type="checkbox"/>	75
1.9.8	Problem explained as unacceptable behaviour (e.g. habits) or motivation	<input type="checkbox"/>	76
1.9.9	Other, (specify) _____	<input type="checkbox"/>	77

- 1.10 ਤੁਹਾਡੇ ਵਿਚਾਰ ਸਨ, ਇਸ ਸਮਸਿਆ ਦੀ ਹੀ ਹੱਲ ਤੇ ? ਤੈਰ ?
 ਕੋਰ ਹੱਲ ? ਪੜ੍ਹਾਏ, ਸੋ । ਤੁਝ ਤੈਰ ਦੱਸ ਸਕਦੇ ਤੈ ?
- 1.10 ਸੂਚਨਾਵਾਤਾ ਦੇ ਵਿਚਾਰ ਵਿਚ ਰੋਗੀ ਦੀ ਸਮਸਿਆ ਦੀ ਹੱਲ ?
 0 = ਨਹੀਂ 1 = ਜਾਂ 8 = ਖੁੱਟਿਓਲ 9 = ਪਤਾ ਨਹੀਂ
- 1.10.1 ਕੋਈ ਵਰਣ ਨਹੀਂ । ਹੱਲ ਦੱਸਣ ਵਿਚ ਅਸਮਰਥ
- 1.10.2 ਪੁਸ਼ਟੀ ਸਾਹਣ ਨਿਵੇਂ ਪਰਿਵਾਰ ਵਿਚ
- 1.10.3 ਜੀਵੀਂ ਸਾਹਣ ਨਿਵੇਂ ਵਿਆਹ ਤੇ ਮੱਦ, ਮਲੇਰਿਆ
- 1.10.4 ਸਮੇ ਦੀ ਲੱਟ ਨਿਵੇਂ ਸੁਗਏ, ਗਾਂਜਾ
- 1.10.5 ਖੁਰਾਕ ਨਾਂ ਖਾਣੇ ਦੀ ਹਮੀ
- 1.10.6 ਵਾਤਾਵਰਣ ਦਾ ਅਸਰ ਨਿਵੇਂ ਥੁਰੀ ਜਣਾ, ਗਰਮੀ ਵਰੋਰਾ
- 1.10.7 ਅਪਣੀ ਸਮਸਿਆਵਾਂ ਨਿਵੇਂ ਘਰੇਲੂ, ਲੜਾਈ, ਝਗੜਾ
 ਸਲੇਸ, ਖਿਆਰ ਵਿਚ ਰਿਗਮਾ ।
- 1.10.8 ਬਰਿਤਰ ਨਾਂ ਨਿਵੇਂਗੀ ਵਿਚ ਬਿਤੀ, ਘਾੱਟ ਵਰੋਰਾ
- 1.10.9 ਸਮਾਜੀ ਨਿਵੇਂ ਚਰਲਾਉ, ਪਰਵਾਸ ਵਰੋਰਾ
- 1.10.10 ਅਲੇਰਿਕ ਸਾਹਣ ਨਿਵੇਂ ਥੁਰੀ ਨਜ਼ਰ, ਭੁੱਤ, ਪਰੇਤ,
 ਆਖਰਾ ਪਰ ਅਰਸਤਾਇਤ ਨਹੀਂ ।

Card 4

1.10 "What do you think may have caused the problem? Anything else? What is the main cause?" Probe and cross-examine: "Can you tell me more about it? Could it be.../give examples/?"

1.10 **RATE INFORMANT'S EXPLANATION OF THE CAUSE OF PATIENT'S CURRENT PROBLEM**

0 = No
 1 = Yes
 8 = Not applicable or not inquired;
 9 = Uncertain

- | | | | |
|---------|--|--------------------------|----|
| 1.10.1 | No explanation, informant cannot identify any specific cause | <input type="checkbox"/> | 21 |
| 1.10.2 | Cause seen in <u>heredity</u> (e.g. "born that way", "got it from his mother", "his uncle was like that", etc.) | <input type="checkbox"/> | 22 |
| 1.10.3 | Cause seen in <u>faulty biological functioning</u> due to disease, brain disturbance or injury (e.g. "had malaria", "fell on his head", etc.) | <input type="checkbox"/> | 23 |
| 1.10.4 | Cause seen in <u>substance abuse</u> (e.g. "drinks too much", "had marijuana", "smokes too much", etc.) | <input type="checkbox"/> | 24 |
| 1.10.5 | Cause seen in <u>faulty nutritional habits</u> (e.g. undernourishment, eating too much or too little of a particular food, etc.) | <input type="checkbox"/> | 25 |
| 1.10.6 | Cause seen in <u>physical effects</u> of environment (e.g. "heat", "bad air" etc.) | <input type="checkbox"/> | 26 |
| 1.10.7 | Cause seen in <u>intimate interpersonal relationships or family life</u> (e.g. "unhappy family life", "spouse ruined his/her health", "love disappointment", etc.) | <input type="checkbox"/> | 27 |
| 1.10.8 | Cause seen in patient's <u>character, or lifestyle</u> (e.g. "bad apple", "worries too much", "overwork", "fatigue", "stress", "too much sex", "no sex", etc.) | <input type="checkbox"/> | 28 |
| 1.10.9 | Cause seen in <u>social environment</u> (e.g. "cultural deprivation", "social class", "social change", "migration", etc.) | <input type="checkbox"/> | 29 |
| 1.10.10 | Cause seen in <u>supernatural forces</u> (e.g. "bewitchment", "spirits", "evil eye", etc.) <u>unprovoked</u> by patient | <input type="checkbox"/> | 30 |

1.10.11. ਅਕੈਰਿਕ ਸਾਹਣ ਜਿਵੇਂ ਤੂੜ, ਘਰੇੜ, ਆਪਗ
ਘੁਸਤਾਇਤ ਜਿਸਰੇਂ ਭਰਾਵਰ ਖਾਲੀ

1.10.11 ਖਾਸ ਹੁਜਾ ਜਿਵੇਂ ਸੱਖ ਫੇਕਿਆ

1.10.12. ਓਹ ਵਰਣਰ ਸੋ

1.10.14. ਅਠੀਜ਼ ਨੂੰ ਤੁਸੀਂ ਕਿਸੇ ਜਿਮੇਵਾਰ ਸਭਿੰਤ ?

1.10.14 ਭੋਜੀ ਜਾਂ ਸੁਚਣਾ ਦੇਣ ਵਾਲੇ ਦੇ ਵਿਚਾਰ ਵਿਚ ਸੀ
ਜਿਮੇਵਾਰੀ ਠਗਈ ਜਈ ਓ ?

0 ਕੋਈ ਜਿਮੇਵਾਰੀ ਨਹੀਂ

1 ਅਧੂਰੀ ਜਿਮੇਵਾਰੀ

2 ਪੂਰੀ ਜਿਮੇਵਾਰੀ

੪ ਖੂਡਿਕੂਏ, ਜਾਂ ਖੁਫਿਆ ਨਹੀਂ

੧ ਅਨਿਸ਼ਚਤ

ਸੁਚਣਾ ਦੇਣ ਵਾਲੇ ਦੇ ਵਿਚਾਰ ਵਿਚ ਕਿਸੇ ਲਿਖੋ ?

1.10.11 Cause seen in supernatural forces (e.g. "bewitchment", "spirits", God's wrath, etc.) provoked by patient through breaking of taboo 31

1.10.12 Cause seen in specific precipitating event of special significance (e.g. "saw a snake and panicked") 32

1.10.13 Other cause (specify) _____ 33

1.10.14 "How much do you hold the patient responsible for the condition?"

1.10.14 Rate degree of patient's own responsibility or control over cause of disorder according to informant 34

- 0 = No responsibility or control
- 1 = Partial responsibility or control
- 2 = Total responsibility or control
- 8 = Not applicable or not inquired
- 9 = Uncertain

Please write a brief narrative about cause(s) as perceived by informant _____

1.15 ਦੀ ਤਰ੍ਹਾਂ ਅਰੀਜ਼ ਦੀ ਸ਼ਰਾਬ ਪੀਣ ਦੀ ਆਦਤ ਤੋਂ
 ਵਾਕਫ਼ ਤੋ? ਜੇ ਤਾਂ ਤਾਂ ਅਰੀਜ਼ ਕਿੰਨੀ ਪੀਂਦਾ ਤੋ? ਪਿਛਲੇ
 ਮਾਸ, ਇਹ ਸ਼ਰਾਬ ਕਿੰਨੀ ਵੱਧ ਸਾਫ਼ ਦੀ ਕੱਚੇ ਨਿਯਮ
 ਗੱਲਾਂ ਤੋਇਆ? (ਪਰਿਵਾਰਕ ਤਨਾਵ, ਕੈਰੀ ਦੀ ਸਮਸਿਆ,
 ਵੱਧ ਖੁੱਛੇ)

1.15 ਪਿਛਲੇ ਮਾਸ ਸ਼ਰਾਬ ਦੇ ਪਾਠੇ ਵਰਣ:

- 0 ਬਿਲਕੁਲ ਨਹੀਂ
- 1 ਕਦੀ ਕਦੀ ਸਮਾਜੀ ਤੌਰ ਤੇ
- 2 ਮੱਧਮ
- 3 ਗੰਭੀਰ ਸਮਸਿਆ ਦਾ ਸ਼ਰ
- 4 ਗੰਭੀਰ ਸਮਸਿਆ
- 9 = ਪਤਾ ਨਹੀਂ

1.16 ਕ ਖੁੱਛੇ ਮੈਂ ਸੁਕਰਾ ਵਾਤਾ ਦੇ ਨਿਮਾਣ ਸ਼ਰਾਬ ਪੀਣ ਤੋਂ
 ਇਨਕਾਰ ਕੀਤਾ ਤੋ।
 ਕੀ ਅਰੀਜ਼ ਦੇ ਸ਼ਰਾਬ ਲਈ ਕਦੇ ਇਲਾਜ ਵਿਰਠਾਇਆ ਸੀ?

1.16 ਸ਼ਰਾਬ ਦੀ ਸਮਸਿਆ ਦਾ ਵਰਣ:

- 0 ਨਹੀਂ
- 1 = ਤਾਂ। ਖੁੱਛੇ ਵਰਣ ਕੌ
- 8 = ਖੁੱਛੇ ਵਰਣ
- 9 = ਪਤਾ ਨਹੀਂ

1.15 "Could you tell us something about X's drinking habits? Do you think that X drinks too much? During the past one year has X had any of the following problems, because of drinking?" /Inquire about family tension, job difficulties, trouble with the law, physical symptoms or illnesses, accidents, etc. - due to use of alcohol./

Card 5

Cols.

1.15 RATE ALCOHOL USE IN LAST YEAR

21

- 0 = None at all
- 1 = Only occasional social drinking
- 2 = Moderate use of alcohol
- 3 = Serious alcohol problem suspected
- 4 = Clear evidence of serious alcohol problem
- 9 = Not known

1.16 Do not ask if excessive or regular use of alcohol denied by informant./ "Has X ever had any treatment for a drinking problem?"

1.16 RATE TREATMENT FOR ALCOHOL PROBLEM IN THE PAST

22

- 0 = No
- 1 = Yes (specify what treatment and when _____

_____)

- 8 = Not applicable, no evidence of excessive or regular use of alcohol
- 9 = Not known

1.17 ਕੀ ਤੁਸੀਂ ਮਾਣਦੇ ਤੇ ਕੀ ਮਹੀਨੇ ਦੇ ਜਾਨਾ, ਆਰਥ ਕਾਂ ਅਫੀਸ ਦਾ ਕਮਾ ਕੀਤਾ ਤੇ ? ਕਿਸੇ ਤਰਖੀਜ਼ ਦਾ ਕਮਾ ਕੀਤਾ ਤੇ ? ਕੀ ? ਕੌ ? ਕਿਸੇ ? ਕੁਝੀ ਜਾਣਕਾਰੀ ਤੇ ਕੀ ਜ਼ਿਆਦਾ ਕੋ ਕੋ ਕੀ ?

ਪਿਛਲੇ ਸਾਲ, ਇਹ ਕਿਸੀ ਕੀ ?

- 0 ਬਿਲਕੁਲ ਨਹੀਂ
- 1 ਸਿਰਫ਼ ਸ਼ੁਰੂ ਤੇ
- 2 ਕੋ ਕਦਮ । 3-4 ਵਾਰੀ ਜ਼ਿਆਦਾ ਦਾ ਸੁਬਾਹ ਨਹੀਂ
- 3 ਕੋ ਕਦਮ । ਪਰ ਜ਼ਿਆਦਾ ਕੋ ਦਾ ਸੁਬਾਹ
- 4 5 ਤੇ ਜ਼ਿਆਦਾ ਵਾਰੀ
- 8 ਸਵਾਲ ਨਹੀਂ ਪੁੱਛਿਆ
- 9 ਕੋ ਕੀ ਸੁਬਾਹ ਨਹੀਂ

ਜੇ 2, 3, 4 ਕੋ ਕੋ ਤੇ ਕੋ ਕੋ ਲਿਖਿਆਂ ਚੀਜ਼ਾਂ ਦੇ ਇਸਤੇਮਾਲ ਦੇ ਬਾਰੇ ਪੁੱਛੋ :

- 0 = ਨਹੀਂ
- 1 = ਹਾਂ
- 8 ਪੁੱਛਿਆ ਨਹੀਂ ਜਾਂ ਪੁੱਛਿਆ
- 9 ਪਤਾ ਨਹੀਂ

- 1.17.1 ਮਾਰਫਿਆ ਜਾਂ ਪੁੱਛਿਆ
- 1.17.2 ਅਫੀਸ
- 1.17.3 ਏਂਡਿੰਗਿ ਮੀਨ
- 1.17.4 ਜਾਨਾ
- 1.17.5 ਏ. ਏ. ਡੀ
- 1.17.6 ਕੋ ਕੋ
- 1.17.7 ਬਾਰਬੀਬੁਰੇਟ
- 1.17.8 ਕੋ ਜਾਤੀ ਕੋ ਕੋ
- 1.17.9 ਕੋ

1.17 "Do you know if X has ever taken drugs like hashish, 'pep pills'/enumerate any other drugs using their locally known names/for pleasure, or to get more strength, or to calm him down? What was it? When? How often? How did he feel? Do you think he might have been taking it more often than you know?"

RATE DRUG-TAKING IN LAST YEAR

23

- 0 = Drug-taking in last year can be safely excluded
- 1 = Drug-taking suspected only
- 2 = Sporadic/up to 3 - 4 times/ drug-taking in last year known, no reason to suspect more frequent abuse
- 3 = Sporadic drug-taking in last year known, but there are reasons to suspect that more frequent abuse actually occurred
- 4 = Five or more instances of drug-taking known
- 8 = Question not asked
- 9 = No information obtained from informant

IF RATING OF EITHER 2, 3 OR 4 MADE ABOVE, INTERVIEWER SHOULD ATTEMPT TO ELICIT INFORMATION ABOUT THE NATURE OF THE SUBSTANCE(S) TAKEN

- 0 = No.
- 1 = Yes
- 8 = Not applicable or not inquired
- 8 = Uncertain

- 1.17.1 Morphine or Heroin
- 1.17.2 Opium or Derivatives
- 1.17.3 Amphetamines or Derivatives
- 1.17.4 Hashish or Marijuana
- 1.17.5 Hallucinogens (LSD and others)
- 1.17.6 Cocaine
- 1.17.7 Barbiturates
- 1.17.8 Non-barbiturates sedatives and tranquilizers
- 1.17.9 Other (specify _____)

24
 25
 26
 27
 28
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 30
 31
 32

1.18 ਜੇ ਤੂੰ ਦੇ ਇਸਤੇਮਾਲ ਦਾ ਕੋਈ ਸਰ ਨ ਤੇ ਤੇ ਦਿੱਤ
 ਮਦਾਨ ਨ ਕਰੋ ? ਕੀ ਮਰੀਜ਼ ਦੇ ਕੋਈ ਇਲਾਜ ਕਰਵਾਇਆ
 ਤੇ ?
 0 ਨਹੀਂ 1 = ਹਾਂ (ਕੌਣ ਅਤੇ ਕੀ ?) 8 = ਖੁਡਿਕੁਲ ਕੋਈ
 ਮੌਖੀ ਨਹੀਂ
 9 ਖਤਾ ਨਹੀਂ

1.18.1 ਮੈਂ ਤੁਹਾਡੇ ਕੋ ਮਦਾਨ ਪੁੱਛਾਗਾਂ ਜੇ ਅਸੀਂ ਤਰ ਰਿਸੇ ਕੀ
 ਪੁੱਛਦੇ ਹਾਂ। ਕੀ ਮਰੀਜ਼ ਨਾ ਕਰੇ ਪੁਲਸ ਨਾਂ ਕਰਨ ਨਾਲ
 ਵਾਸਤਾ ਖਿਆਲ ? (ਜੇ ਲਗੇ ਕਿ ਗਿਰਫਤਾਰੀ ਵਗੇਰਾ
 ਕੁਝ ਤੇ ਤਾਂ ਕੀ ਹੋਰ ਖਤਰਾ ਲਗੇ)

1.1.9 ਸੁਰਮ ਦੀ ਵਜਾ ਨਾਲ ਕਰਨ ਦੀ ਹਿਸਟਰੀ:
 0 ਨਹੀਂ 1 ਹਾਂ 8 ਅਨਿਸ਼ਚਿਤ 9 ਖਤਾ ਨਹੀਂ

1.19.1 ਗਿਰਫਤਾਰੀ

1.19.2 ਸ਼ੌਰ, ਵਗੇਰਾ ਦੀ ਖੋਜ

1.19.3 ਪ੍ਰੋਬੇਸ਼ਨ

ਜੇ ਤਾਂ ਤਾਂ ਖੁਰਾ ਵਿਖੇ:

ਗਿਰਫਤਾਰੀ ਦੀਆਂ	ਸੁਰਮ	ਸਜ਼ਾ	ਵਿਖੇ	ਕਿੱਸੀ
ਖਾਸ਼ ਕੀ ਤਰੀਖ			.	ਦੇ

1.18 Do not ask if no evidence of drugs use.
 "Has X had any treatment for a drug problem?"

RATE TREATMENT FOR DRUG PROBLEM IN THE PAST

	33
--	----

0 = No
 1 = Yes (specify what treatment and when _____)

8 = Not applicable, no evidence of drug use
 9 = Not known

1.19 "I want now to ask you a question we ask routinely of everybody: has X ever had any kind of trouble with the law, or the Police?"
 /If reply suggestive of a possibility of past contacts with the law, probe further about arrests, detection in an institution, probation, etc., and obtain details to fill in the following chart./

1.19 HISTORY OF CONTACTS WITH THE LAW BECAUSE OF OFFENCE(S)

0 = No
 1 = Yes
 8 = Uncertain
 9 = Not known

- 1.19.1 Arrested
- 1.19.2 Detained in an institution
- 1.19.3 Probation

	34
	35
	36

IF RATED POSITIVE ABOVE, FILL IN DETAILS:

Date of charge or arrest	A. Nature of offence or charge	B. Verdict and sentence (if any)	C. Type of institution in which sentence if any, was served	D. Time in institution or on probation

1.20 ਸਾਰੀ ਗੁਰੂਨਾਮੇ ਦੇ ਵਾਕਾਂ ਤੋਂ ਇਸੇ ਅਰਥ ਵਾਲੀਆਂ ਸ਼ਬਦਾਂ ਦੀ ਸੂਚੀ ਤਿਆਰ ਕਰੋ:



ਕਿਸੇ ਅਰਥ ਵਾਲੀ ਸ਼ਬਦਾਂ ਦੇ ਲਿਖਣ ਨਾਲ ਪੂਰੀ ਸੂਚੀ ਦਾ ਵਰਣ ਕਰੋ। ਪਰੋਲੇ ਲਿਖਣ ਅਤੇ ਹੋਰ ਵੀ ਸ਼ਬਦਾਂ ਦੀ ਸੂਚੀ ਲਿਖੋ:

1.20 ON THE BASIS OF ALL INFORMATION AVAILABLE ESTIMATE THE NUMBER OF MONTHS SINCE THE ONSET OF THE CURRENT MENTAL DISORDER IN THIS PATIENT

(Re-rate this item at end of interview, at any other time if additional data necessitate this.)

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 37-39

No. of months
(999 if impossible to estimate)

Please write in a brief narrative summary of the early symptoms and signs of the patient's psychotic disorder (including any prodromal or pre-psychotic manifestations), the mode of onset, the evolution of symptoms, and the relevant

ਦਸਵਾਂ ਹਿੱਸਾ

10 ਸੀ ਅਗਲੇ ਦੇ ਦੋ ਤਨਖਾਹੀ ਕੰਮ ਸੀਤਾ ਕੋ?

10.1 ਜੇ ਸੀਤਾ ਕੋ ਤਾਂ ਲਿਖੋ (ਚਾਰੇ ਖੁਦ ਕੰਮ ਸੀਤਾ ਕੋ)

0 ਸੀ' 1 = ਤਾਂ 9 ਖਤਾ ਸੀ'

10.2 ਖਿਛਕੇ ਸਾਫ਼ ਕੈਰੀ ਕਿੱਤੀ ?

01 = ਇਕ ਖਾਨਾ ਕੋ ਖਾਣ 99 ਖਤਾ ਸੀ'

10.3 ਕੈਰੀ ਨਾ ਕੋਈ ਵੀ ਵਜਾ ?

0 ਖਰੋਲੁ ਕੰਮ 2 ਇਕਿਆਰਕੀ 3 = ਤੋਰ

8 ਖੁੱਡਕੁਲ 9 = ਖਤਾ ਸੀ'

ਜੇ ਅਗਲੇ ਦੇ ਦੋ ਤਨਖਾਹੀ ਕੰਮ ਸੀਤਾ ਤਾਂ ਸੀ ਸੀਤਾ?

10.4 ਅਗਲੇ ਦੀ ਕੈਰੀ ਜਾਂ ਸਾਠੇਧਾਹੀ ਕੰਮ ?

00 ਹਿਟਾਇਰਡ

01 ਖੇਤੀ ਖਾੜੀ (ਅਖਣਾ ਜਾਂ ਮਗਠਣ)

02 ਖੇਤੀ ਖਾੜੀ (ਦੁਸਰੇ ਦੀ)

03 ਸਾਠੇਧਾਹੀ (ਅਖਣਾ ਜਾਂ ਮਗਠਣ)

04 ਠੇਕੇਦਾਰੀ ਵਿਚ (ਅਧਿਕ ਜਾਂ ਘੱਟ)

05 ਠੇਕੇਦਾਰੀ ਵਿਚ (ਖੁੱਡ)

06 ਕਲਰ ਜਾਂ ਮੈਨੇਜਰ (ਅਧ ਖੁੱਡੀਣ)

07 ਕਲਰ ਜਾਂ ਮੈਨੇਜਰ (ਖੁੱਡੀਣ)

08 ਸਾਠੇਧਾਹੀ (ਗਲੀ ਜਾਂ ਦੁਕਾਨ)

09 ਸਾਠੇਧਾਹੀ (ਜਿਥੇ ਕੰਮ)

10 ਸਾਠੇਧਾਹੀ (ਦਸ ਕੋ ਕੰਮ ਦੀ ਕੈਰੀ)

11 ਦਸ ਕੋ ਕੰਮ ਵਿਚ ਸਾਠੇਧਾਹੀ ਦੀ ਕੈਰੀ ਦਾ ਮਾਮਲਾ

PART 10 - OCCUPATION

10. Has the patient ever had a paid job (earning occupation)?

Card 15

Cols.

10.1 RATE IF EVER EMPLOYED (INCLUDE SELF-EMPLOYED)

- 0 = No
1 = Yes
9 = Not known

 3210.2 TOTAL NUMBER OF YEARS OF EMPLOYMENT (INCLUDE SELF-EMPLOYED,
DO NOT INCLUDE HOUSEWIFE OR STUDENTS)

- 01 = Less than one year
99 = Not known

 33, 34

10.3 RATE REASON FOR NEVER HAVING HAD A PAID JOB

- 0 = A Housewife
2 = A Student
3 = Other (specify _____)
8 = Not applicable
9 = Not known

 35

If patient ever had an earning occupation, describe main occupation

10.4 RATE PATIENT'S MAIN OCCUPATION

- 00 = Retired, pensioner
01 = Agricultural worker - self-employed farmer
or member of a cooperative
02 = Agricultural worker - employed or paid in kind
03 = Craftsman, artisan, etc. (self-employed, employed,
or member of a cooperative)
04 = Industrial worker - unskilled or semi-skilled
05 = Industrial worker - skilled (e.g. foreman)
06 = Clerical or administrative occupation -
or semi-skilled (e.g. messenger)
07 = Clerical or administrative occupation -
skilled (e.g. secretary)
08 = Service - trade occupation - unskilled or semi-
skilled (e.g. street vendor, shop assistant)
09 = Service or trade occupation - skilled (e.g. nurse)
10 = Owner of small or medium-size business (employing up
to 10 people)
11 = Owner of business employing more than 10 people

 36, 37

- 12 = ਸਾਠੇਬਾਰ ਜਿਠੇ ਤਾਰਣ, ਅਠਸਰ
 - 13 = ਫੈਜੀ ਅਠਸਰ
 - 14 = ਘਰੇਲੂ ਦਿਸਤਰੀ
 - 15 = ਬੇਰੋਜ਼ਗਾਰ
 - 16 = ਵਿਦਿਆਰਥੀ
 - 17 = ਤੋਰ 18 = ਪ੍ਰਤਿਬੁਝ, 19 = ਖਤਾ ਨੀਂ
- ਦਰੁਸ਼ਨ

10.5 ਖਿਛਲੇ ਖਾਣ, ਸਰੀਰ ਦੀ ਖੁਰਾਕੀ ਰੱਖ ਰਹਾ ਰਿਹਾ ਤੋ ?

10.5 ਖਿਛਲੇ ਖਾਣ ਬੇਰੋਜ਼ਗਾਰੀ

0 = ਇਹ ਅੱਧੀ ਟਾਰੀ ਤੋਂ ਜ਼ਿਆਦਾ ਤੇ ਬੇਰੋਜ਼ਗਾਰੀ ਤੋਂ ਜ਼ਿਆਦਾ ਬੇਰੋਜ਼ਗਾਰ ਰਿਹਾ ਤੋ

1 = ਸਾਹ ਦਰੁਸ਼ਨ ਰੱਖ ਰਹਾ ਰਿਹਾ ਤੋ

੪ = ਪ੍ਰਤਿਬੁਝ। ਕੋਈ ਕੋਰੀ ਨੀਂ ਸੀ

੧ = ਖਤਾ ਨੀਂ

10.6 ਜੇ ਇਹ ਅੱਧੀ ਟਾਰੀ ਤੋਂ ਜ਼ਿਆਦਾ ਬੇਰੋਜ਼ਗਾਰ ਰਿਹਾ ਤੋ ਤਾਂ ਸੀ ਦਰੁਸ਼ਨ ਸੀ ?

10.6 ਬੇਰੋਜ਼ਗਾਰੀ ਦੇ ਸਾਹੁ ਲਿਖੋ ?

0 = ਅਠਸਰ ਰੋਜ

1 = ਸਰੀਰਿਕ ਰੋਜ ਤੇ ਸੰਜੋਗੀ

3 = ਤੋਰ ਲਿਖੋ ...

੫ = ਉਠਾਰ ਲਿਖੇ ਦਾ ਮਿਰਸਠ

੪ = ਪ੍ਰਤਿਬੁਝ। ਕੋਈ ਕੋਰੀ ਨੀਂ ਸੀ

੧ = ਖਤਾ ਨੀਂ।

- 12 = Professional (e.g. doctor), high level executive
or administrator
13 = Military (officer rank)
14 = Housewife
15 = Unemployed
16 = Student
17 = Other
88 = Not applicable
99 = Not known

Specify occupation _____

10.5 During the past one year, has the patient been working all the time?

10.5 RATE EMPLOYMENT (OR EARNING JOB) IN PAST ONE YEAR

- 0 = Has experienced one or more period of unemployment lasting one month or more 38
1 = Has been working practically all the time
8 = Not applicable, patient never had a paid job
9 = Not known

10.6 If the patient has had one or more periods of unemployment during the last year, what was the cause of the unemployment?

10.6 RATE REASON FOR UNEMPLOYMENT

- 0 = Patient's mental illness 39
1 = Physical illness or disability
2 = General employment situation (specify _____)
3 = Other (specify _____)
4 = Combination of the above _____
8 = Not applicable, patient was not unemployed
9 = Not known

10.7 ਜੇ ਠੇਕੇਗਾਰੀ ਤਾਂ ਹੀ ਮਹੀਨਾ ਪੂਰੀ ਤਰ੍ਹਾਂ ਜਾਂ ਅੱਧੀ ਤਰ੍ਹਾਂ 'ਰਮ' ਹੀਤਾ ਖੁੰ ?

10.7 ਖਿਠਲੇ ਮਾਲ 'ਰਮ' ਦੇ ਗਲਾਤ ਵਿਸ਼ ਤਹ ਦੇ ਸੀ ?

- 0 ਪੂਰੀ ਤਰ੍ਹਾਂ । ਸੰਮਤ
- 1 ਪੂਰੀ ਤਰ੍ਹਾਂ । ਆਸ਼ਚਰਿਤ
- 2 ਆਸ਼ਚਰਿਤ 'ਰਮ' । ਸੰਮਤ ਸਿਫਤਿ
- 3 ਆਸ਼ਚਰਿਤ 'ਰਮ' । ਆਸ਼ਚਰਿਤ
- 4 ਹੁਣ ਪੂਰਾ । ਹੁਣ ਆਸ਼ਚਰਿਤ ਸੰਮਤ (ਆਸ਼ਚਰਿਤ)
- 5 ਹੁਣ ਪੂਰਾ । ਹੁਣ ਆਸ਼ਚਰਿਤ ਆਸ਼ਚਰਿਤ
- 6 ਜੇ
- 8 'ਹੀ' 'ਰਮ' 'ਰਮ' ਸੀ । ਖੂਡਿਤੁਲ
- 9 ਖਤਾ 'ਰਮ'

10.8 ਹੀ ਮਹੀਨਾ 'ਰਮ' 'ਰਮ' ਖਰਦੀ ਖੁੰ ?

10.8 'ਰਮ' ਖਰਦਾ ਹੀ ਟਰਦਾ 'ਰਮ' ?

- 0 'ਰਮ' 1 = 1 ਖਰਦਾ 2 = 'ਰਮ' ਖਰਦੇ
- 3 = 'ਰਮ' ਜਾਂ ਸਿਮਾਦਾ
- 8 = ਖੂਡਿਤੁਲ ਜਾਂ ਮਹੀਨਾ 'ਰਮ' 'ਰਮ' 'ਰਮ' ਸੀ
- 9 = ਖਤਾ 'ਰਮ'

10.9 ਮਹੀਨਾ ਹੀ ਮਹੀਨਾ ਆਮਦਾ ਹੀ ਸੀ ?

੨) ਖਰਦੀ 'ਰਮ' 'ਰਮ' 'ਰਮ' ਖ) 'ਰਮ' 'ਰਮ'

- 0 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ'
- 1 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ'
- 2 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ'
- 8 ਖੂਡਿਤੁਲ । 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ' 'ਰਮ'
- 9 ਖਤਾ 'ਰਮ'

10.7 If employed, has the patient's work during the last year been mainly part-time or full-time?

10.7 RATE CONDITIONS OF WORK IN PAST YEAR

- 0 = Full-time only, normal conditions
 1 = Full-time only, sheltered conditions
 2 = Part-time only, normal conditions
 3 = Part-time only, sheltered conditions
 4 = Some full-time and some part-time periods, normal conditions
 5 = Some full-time and some part-time periods, sheltered conditions
 6 = Other (specify _____)
 8 = Not applicable, patient did not have a paid job in the past year
 9 = Not known
- 40

10.8 Has the patient changed jobs during the past year?

10.8 RATE CHANGES OF JOBS IN PAST YEAR

- 0 = No change
 1 = One change
 2 = Two changes
 3 = Three or more changes
 8 = Not applicable, patient did not have a paid job in the past year
 9 = Not known
- 41

10.9 What was the average level of the patient's gross earned income during the last year?

- a. In relation to the local community
 b. In relation to the country as a whole

- 0 = Upper one-third of the earned income range
 1 = Middle one-third of the earned income range
 2 = Lower one-third of the earned income range
 8 = Not applicable, patient did not have a paid job in the last year
 9 = Not known
- 42
 43

10.10 Estimate the degree of responsibility patient has in his last job?

10.10 RATE DEGREE OF RESPONSIBILITY IN JOB

- 0 = Little: works under constant supervision
 1 = Moderate: works mainly on his/her own with little or occasional supervision 44
 2 = High: patient supervises others
 3 = Nature of work does not involve supervision by others
 8 = Not applicable, patient never had a paid job
 9 = Not known

10.11 Estimate the degree of prestige (status) of patient's last job in the community

10.11 RATE SOCIAL PRESTIGE OF PATIENT'S JOB

- 0 = Low 45
 1 = Average
 2 = High
 3 = Impossible to estimate
 8 = Not applicable (specify reason _____)

10.12 Is the patient's occupational level in last job the same as his/her highest level in any job before last?

10.12 RATE UPWARD/DOWNWARD CHANGE IN OCCUPATIONAL LEVEL

- 0 = The same or higher
 1 = Lower 46
 2 = Not applicable, patient never employed or started working less than a year ago
 3 = Not known

10.12 Consider: (i) patient's ability to conform to the work routine - going to work regularly and on time, observing the rules, etc; (ii) quality of performance and output. (Household work excluded).

10.13 ਖਿਛਲੇ ਮਾਣ, ਇਕ ਸੰਮ ਦੀ ਖੁਰਦਾ ਦਾ ਵਰਣ

- 0 = ਮਹੀਜ਼ ਰੋਜ਼ ਸੰਮ ਰਹਾ ਹਿਗ ਤੇ ਅਤੇ ਸੰਮ ਦੀ ਗੁਣਾ ਅਤੇ ਆਸ਼ਾ ਤੇ ਮਿਲਦੀ ਤੇ
- 1 = ਉਸ ਜਾਗੀ ਸੰਮਰੀ ਕਰ ਰੇ ਲੋਕਾਂ ਸੁੱਲੇ ਜ਼ਿਆਦਾ ਛੁੱਟੀ ਲਈ ਤੇ ਅਤੇ ਲਗਾਤਾਰ ਸਿਰਾਅਤ ਰਹਾਹਿਗ ਤੇ ਇ ਸੰਮ ਉਸਦੇ ਵਸ ਤੇ ਬਾਹਰ ਤੇ। ਜੇ ਇ ਸੰਮ ਆਸਰੇ ਤੇ ਤਾਂ 2 ਲਿਖੋ।
- 2 = ਮਹੀਜ਼ ਸੰਮ ਤੇ ਅਕਸਰ ਜੋਰ ਗਜ਼ਿਹ ਤੁੰਦੀ ਤੇ ਅਤੇ ਉਸਨੂੰ ਸੰਮ ਖਰਾਬ ਰਹੁ ਦੀ ਵਜਾ ਸਾਲ ਸੰਮਰੀ ਤੇ ਮੁਠਾਬ ਦੇ ਦਿੱਤਾ ਗਿਆ ਤੇ।
- ੧ = ਖੂਡੇ ਸੁੱਲੇ ਨਿਠੇ ਮਹੀਜ਼ ਆਰੇ ਸੰਮ ਰਹਾ ਤੇ ਜਾਂ ਸੰਮ ਲੀ ਰਹਾ।

10.14 ਘਰੇਲੂ ਸੰਮ ਸਕਾ ਇਕ ਖਿਛਲੇ ਮਾਣ ਵਿੱਚੀ ਸੰਮਰੀਤਾ

- 0 = ਖਿਛਲੇ, ਮਾਣਾਂ ਦੀ ਤਰਾ ਕੋਈ ਫਰ ਲੀ।
- 1 = ਸੁੱਲੇ ਗਿਗਾਟ
- 2 = ਜ਼ਿਆਦਾ ਗਿਗਾਟ
- ੩ = ਸੁਘਾਰ
- ੪ = ਮਹੀਜ਼ ਨੇ ਕਦੇ ਘਰੇਲੂ ਸੰਮ ਲੀ' ਰੀਤਾ
- ੧ = ਖਤਾ ਲੀ'

10.13 RATE WORK PERFORMANCE IN JOB IN LAST YEAR

- 0 = Patient goes to work regularly; output and quality of performance within levels expected for job 47
- 1 = Compared with the average employee in same type of job or in same place, the patient has been absent from work more often, or there has been a decline in his/her output and quality of performance; or patient has complained persistently that work is too heavy for him/her. If about description applies to a sheltered job, rate 2
- 2 = Patient has been absent from work most of the time; or has been fired because of poor performance; or has shown more than once gross neglect at work
- 9 = Not applicable, e.g., patient not working or a house-wife

10.14 RATE PERFORMANCE IN HOUSEHOLD WORK IN LAST YEAR

- 0 = No change in comparison to previous years 48
- 1 = Some deterioration
- 2 = Marked deterioration
- 5 = Improvement
- 8 = Not applicable, patient never did household work
- 9 = Not known

ਪੜ੍ਹਾਈ - ਲਿਖਾਈ

11.1 ਅੰਗਰੇਜ਼ੀ ਦੀ ਸ਼ੁਰੂਆਤ 'ਜ਼ਿਆਦਾ' ਪੜ੍ਹਾਈ - ਲਿਖਾਈ ਕਿਸ ਲਈ, ਕੀ ਹੈ ?

11.1 ਅੰਗਰੇਜ਼ੀ ਦੀ ਪੜ੍ਹਾਈ-ਲਿਖਾਈ ਦਾ ਵਰਣਨ:

0 = ਕੋਈ ਵੀ ਨਾਂ ਪ੍ਰਾਇਮਰੀ ਸਕੂਲ ਖਤਮ ਕੀਤੀ ਹੋਵੇ।

1 = ਪ੍ਰਾਇਮਰੀ ਸਕੂਲ, ਖਤਮ (4-5 ਸਾਲ ਦੀ ਪੜ੍ਹਾਈ)

2 = ਸੈਕੰਡਰੀ ਸਕੂਲ, ਜਾਂ ਬਹਾਬਰੀ ਦੀ ਪੜ੍ਹਾਈ

3 = ਸੈਕੰਡਰੀ ਸਕੂਲ ਜਾਂ ਯੂਨੀਵਰਸਿਟੀ ਦੀ ਪੜ੍ਹਾਈ ਪੂਰੀ

4 = ਯੂਨੀਵਰਸਿਟੀ ਪੂਰੀ ਕੀਤੀ

5 = ਉੱਚ ਦੂਜਾ ਸਕੂਲ ਪੂਰਾ ਕੀਤਾ

9 = ਖਤਮ ਕੀਤੀ

11.2 ਕੀ ਖਿੱਚਣੇ ਸਾਫ਼, ਵਿੱਚ ਅੰਗਰੇਜ਼ੀ ਪੜ੍ਹਾਈ ਕਰਨਾ ਚਿੰਨ੍ਹ ਹੈ ?

11.2 ਖਿੱਚਣੇ, ਸਾਫ਼, ਦੀ ਪੜ੍ਹਾਈ:

0 = ਕੋਈ

1 = ਜਾਂ ਪੂਰੀ ਪੜ੍ਹਾਈ

2 = ਜਾਂ ਮਾਂ ਦੀ ਪੜ੍ਹਾਈ ਮਾਂ ਦੀ ਕਮਾਈ

3 = ਜਾਂ ਮਾਂ ਦੀ ਪੜ੍ਹਾਈ ਪੂਰੀ ਕਮਾਈ

4 = ਜਾਂ ਪੂਰੀ ਪੜ੍ਹਾਈ ਕਰਨੇ, ਪੂਰੀ ਕਮਾਈ

5 = ਉੱਚੇ ਕਰੋ ਪੜ੍ਹਾਈ ਕਰਨੇ ਚੰਗੇ ਕੀਤੇ

9 = ਖਤਮ ਕੀਤੀ

11.3 ਕੇ ਅੰਗਰੇਜ਼ੀ ਪੜ੍ਹੇ ਕਿਹੜੇ ਕੀ ਤਾਂ ਕਿਸ ਤਰ੍ਹਾਂ ਦੀ ਪੜ੍ਹਾਈ ?

0 = ਸੀਮਤ 1 = ਸਮਝਾਏ ਗਏ 2 = ਸਪੈਸ਼ਲਾਈਜ਼ਡ

8 = ਯੂਨੀਵਰਸਿਟੀ, ਕੋਈ ਪੜ੍ਹਾਈ ਕੀਤੀ 9 = ਖਤਮ ਕੀਤੀ

11.4 ਕੇ ਪੜ੍ਹਾਈ ਕੀਤੀ ਖਿੱਚਣੇ ਸਾਫ਼ ਤਾਂ ਕਿਹੜੇ ਕਰਨਾ ਕੀ ?

0 = ਬਹੁਤ ਘੱਟ 1 = ਉੱਤਮ 2 = ਘੱਟ 8 = ਵਿਦਿਆਰਥੀ
ਕੀ 9 = ਖਤਮ ਕੀਤੀ

PART II - EDUCATION

11.1 "What is the highest level of completed education the patient has achieved?"

11.1 RATE PATIENT'S LEVEL OF EDUCATION

- 0 = No schooling or unfinished primary school
 1 = Finished primary school (e.g. 4-5 years of completed education) 49
 2 = Finished secondary school or equivalent (e.g. technical or occupational)
 3 = Finished school intermediary between secondary school and university (wherever applies)
 4 = Finished university
 7 = Finished other school (specify _____)
 9 = Not known

11.2 "Has the patient been a student during the past one year?"

11.2 STUDYING DURING PAST YEAR

- 0 = No 50
 1 = Yes, full-time student
 2 = Yes, part-time student and part-time working
 3 = Yes, part-time student and full-time working
 4 = Yes, full-time student and full-time working
 5 = Has been a student for some time but then discontinued
 9 = Not known

11.3 "If patient has been a student during past year, what kind of education was he receiving?"

11.3 NATURE OF STUDY DURING PAST YEAR

- 0 = General (e.g. reading, writing, arithmetic) 51
 1 = Specialized - training for a trade or apprenticeship (specify _____)
 2 = Specialized - academic (specify nature of course _____)
 8 = Not applicable, patient was not a student
 9 = Not known

11.4 RATE WORK (STUDY) PERFORMANCE IN LAST YEAR IF PATIENT WAS A STUDENT

- 0 = Excellent 52
 1 = Fair
 2 = Poor
 8 = Not applicable, patient was not a student
 9 = Not known

ਧਰਮ

12.1 ਸ੍ਰੀ ਮਹੀਮਾ ਵਿਖੇ ਯਾਗਮੇਰ ਫਿਰੇ ਸ੍ਰੀ ਸਾਂਚਾ ਤੋ ?

12.1 ਮਹੀਮਾ ਦੀ ਧਰਮ ਮੈਂਬਰ ਸਿਖਾ ਦਾ ਵਰਣ:

੦ = ਕੁਝ ਵੀ ਨਹੀਂ ੧ = ਜਾਂ। ਵਰਣ ੧ = ਖਤਾ ਨਹੀਂ

12.2 ਸ੍ਰੀ ਮਹੀਮਾ ਦੇ ਯਾਗਮੇਰ ਗਲਾਂ ਵਿਚ ਕੋਈ ਵਿਲੱਖਣਤਾ ਵਿਖਾਈ ਤੋ ?
(ਖਾਸਤਰ ਪਿਠਲੇ ਸ਼ਬਦ ਵਿਚ)

੦ = ਬਿਲਕੁਲ ਨਹੀਂ 1 = ਸੁਪ੍ਰ ਤਿਉਗਰ ਮਸਾਏ ਅਰ ਬਿਗਾਰੀ
ਨਹੀਂ ਜ਼ਿਆਦਾ ਨਹੀਂ

2 = ਮੈਸਤ ਤੋ ਜ਼ਿਆਦਾ ੪ = ਪ੍ਰਤਿਬੁਝ ੧ = ਖਤਾ ਨਹੀਂ

12.3 ਧਰਮ ਪਰਿਵਰਤਨ ਦਾ ਵਰਣ ਸੋ :

ਪਿਠਲੇ 1-3 ਸ਼ਬਦ ਵਿਚ ਸ੍ਰੀ ਤੋਇਆ ?

੨) ਸ੍ਰੀ ਮਹੀਮਾ ਦੇ ਧਰਮ ਵਿਚ ਕੋਈ ਬਦਲਾਉ ਆਇਆ
ਕਿਉਂ ਧਰਮ ਬਦਲਾ ਦਾ ਤੋਰ ਧਰਮ ਵਿਚ ਵਿਲੱਖਣਤਾ
ਸੇ ਕੇਵਲ

੪) ਧਰਮ ਦੇ ਖਲਵ ਵਿਚ ਵਧਾਉ ਦਾ ਘਟਾਉ ਤੋਇਆ ?

ਬਦਲਾਉ

੦ = ਨਹੀਂ

1 = ਜਾਂ

੪ = ਪ੍ਰਤਿਬੁਝ

੧ = ਖਤਾ ਨਹੀਂ

ਵਧਾਉ | ਘਟਾਉ

੦ = ਨਹੀਂ

1 = ਵਧਾਉ

2 = ਘਟਾਉ

੪ = ਪ੍ਰਤਿਬੁਝ

ਸੋ ੨) ਦਾ ੪) ਵਿਚ ਜਾਂ ਦਾ ਜਵਾਬ ਤੋ 3) ਬਦਲਾਉ
ਠੇਠਾਂ ਲਿਖੋ:

PART 12 - RELIGION

12.1 "Does patient belong to any particular religious group or church?"

12.1 RATE PATIENT'S RELIGIOUS AFFILIATION (REGARDLESS OF ACTIVITY)

0 = None
 1 = Yes (specify religion or denomination) 53
 9 = Not known

12.2 "has patient shown any active interest in religion during the past year"?

12.2 RATE CURRENT DEGREE OF RELIGIOUS ACTIVITY

0 = None at all
 1 = Observed some rituals or festivities but not more active than average from his cultural and social group 54
 2 = Much more active than average for his cultural and social group
 8 = Not applicable
 9 = Not known

12.3 RATE RECENT CHANGES IN RELIGION

Over the last 1 - 3 years has there been:

- a) any change in patient's religion? (e.g. sudden emergence of interest or change to a different religion) 55
- b) any increase or decrease of patient's intensity of participation in religious activities? 56

Change	Increase/decrease
0 = No	0 = Neither
1 = Yes	1 = Increase
8 = Not applicable	2 = Decrease
9 = Not known	8 = Not applicable

"If yes to either a) or b) specify the nature of the change:"

14.3 ਜੁਣੇ ਮੈਂ ਤੁਹਾਨੂੰ ਅਹੀਜ਼ ਦੇ ਵਿਅਕਤਿਕ ਦੇ ਘਰੇ ਪੁਛਾਂਗਾ।
ਪੁਛਾਂਗੀ। ਇਸੇ ਦੇ ਵਿਅਕਤਿਕ ਵਿਆਹੀ ਸ਼ੁਰੂ ਤੋਂ ਤਾਂ
ਪਠੇ, ਕਿਹਾ ਕੀ ?

ਅਹੀਜ਼ ਦੇ ਵਿਅਕਤਿਕ ਦੇ ਵਰਣਨ ਹੋ। ਇਹ ਚਿੰਨ੍ਹ ਤੇ
ਆਦਤਾਂ ਹੋਣੀਆਂ ਤੇਰੇ ਗੁਣਾਂ ਤੇਰੇ ਖਾਹਿਸ਼ੇ ਹਨ। ਇਸ
ਦੀ ਉੱਚੀ ਖੋਜ ਲਈ ਪਤਾ ਕਰਨਾ ਮੁਸ਼ਕਿਲ ਹੈ ਕਿਸੇ ਦੀ
ਵਿਆਹੀ ਮੁਸ਼ਕਿਲ ਵਿਚ ਸ਼ੁਰੂ ਤੋਂ ਹੈ।

14.3 ਵੱਡੇ ਤੋਂ ਤਾਂ ਖਾਣ ਪਰ ਵਿਆਹੀ ਸ਼ੁਰੂ ਤੋਂ ਤਾਂ ਪੁਛਾਂਗੀ ਕੀ
ਅਹੀਜ਼ ?

0 = ਤੇਰੇ ਗੁਣਾਂ 1 = ਗੁਣਾਂ 2 = ਅਹੀਜ਼
8 = ਪੁਛੇ ਗਏ 9 = ਪਤਾ ਲੱਗੇ ਜਾਂ ਪੁਛਿਆ ਕੀ

14.3.1. ਕੁਝ ਖੋਜਾਂ ਦੀ ਸਿਫਤ ਤੇ ਸੁਰ ਕਰਨਾ ਕਿਹਾ ?

14.3.2. ਸਿਰਫਤ ਕਰਨਾ ਤੇ ਕਿ ਕੋਈ ਤੇਰੇ ਘਰੇ ਹਨ ?

14.3.3. ਕਿਸੇ ਵਿਆਹੀ ਵਿਆਹੀ ਕਿਹਾ ?

14.3.4. ਗੁਣਾਂ ਦੇ ਘਾਟਨੇ ਅਤੇ ਤੇ ਵਿਆਹ ?

14.3.5. ਉੱਚੇ ਦੇ ਘਰੇ ਸਿਰਫਤ ਕਿਹਾ ?

14.3.6. ਕਿਸੇ ਤੇਰੀ ਆਂਦੀ ਕੀ ?

14.3.7. ਪੁਛੇ ਉੱਚੇ ਕੋਲੇ ਹੋਣਾ ਕਿਹਾ ?

14.3.8. ਘਾਟਨੇ ਆਦਤਾਂ ਤੇ ਕੇਮ ਕਾਲ ਦੀ ਆਦਤ ?

14.3.9. ਵਿਆਹੀ ਵਿਚ ਕੋਈ ਜਾਂ ਸੁਰੀ ਗਿਣਿਆ ਜਾਂਦਾ ?

14.3.10. ਕੁਝ ਖੋਜਾਂ ਤੇ ਕੋਲੇ ਕਾਲੇ ਕਾਲੇ ਅਹੀਜ਼ ?

14.3 "Now I would like to ask you about the sort of person X was as an adult, up to the moment when his behaviour changed/or present illness started".

14.3 RATE PATIENT'S ADULT PREMORBID PERSONALITY TRAITS

The characteristics listed below should have been present for at least several years before the onset of the illness. This makes it difficult to rate premorbid personalty in patients whose illness began in early adolescence

14.3 "AS A GROWN-UP PERSON, (BUT BEFORE ONSET OF ILLNESS), DID THE PATIENT?"

- 0 = Absent or not present in any marked degree
 1 = Present in marked degree
 2 = Uncertain
 8 = Not applicable
 9 = Not known (not asked)

- | | | | |
|---------|--|--------------------------|----|
| 14.3.1 | Appear to be generally suspicious of other people's intentions? | <input type="checkbox"/> | 21 |
| 14.3.2 | Often complain that people were picking in him? | <input type="checkbox"/> | 22 |
| 14.3.3 | Show excessive jealousy? | <input type="checkbox"/> | 23 |
| 14.3.4 | Show marked lack of self-criticism, or inability to see his own fault when he did something wrong? | <input type="checkbox"/> | 24 |
| 14.3.5 | Seem to be generally gloomy and pessimistic about the future? | <input type="checkbox"/> | 25 |
| 14.3.6 | Appear to be generally excited and energetic? | <input type="checkbox"/> | 26 |
| 14.3.7 | His mood go up and down all the time? | <input type="checkbox"/> | 27 |
| 14.3.25 | Have set routine or fixed habits which he had to keep or else got upset? | <input type="checkbox"/> | 45 |
| 14.3.26 | Seem to be considered in the community to be an eccentric? | <input type="checkbox"/> | 46 |
| 14.3.27 | Impress others as being emotionally cool and withdrawn? | <input type="checkbox"/> | 47 |

- 14.3.28 ਖੂਰ ਖੋਲਣ ਅਤੇ ਗਲਾਂ ਟੁਕਾ ਰਹਣ ਦੀ ਆਦਤ ਹੈ ?
- 14.3.29 ਅਖੌਣੇ ਤੋੜੇਖ ਟੁਕਾ ਆਸ਼ਾ ਟੁਕੀ ਹਿਗ ਹੈ ?
- 14.3.30 ਬਧਾਇ ਰਾਜ ਸੁਫੁਣ ਦੀ ਆਦਤ ਹੈ ?
- 14.3.31 ਟਿਸਾਹ ਰਹਣ ਟੁਕਾ ਅਤੇ ਨਿਰਤੰਗ ਮਹਿੰਦਾ ਹੈ ?
- 14.3.32 ਟਿਸਾਹ ਰਹਣ ਟੁਕੀ ਅਕਾਰ ਅਤੇ ਅਖੌਣੇ
ਆਖ ਹੈ ਟੁਕੇ ਟੇ ਹੈ ?

ਤੁਹਾਡੇ ਟਿਚਾਰ ਟਿਚ ਮਹਿੰਦਾ ਦੇ ਟਿਕਰਤਿੰਟੇ ਦਾ
ਟੁਕੇ ਕੇ ਤੁਸੀਂ ਰਹੁਆਖਾ ਹੈ ਤਾਂ ਟੁਕੇ (ਟੁਕਾਂ
ਟਿਕਾ)

Card 17

- 14.3.28 Have a tendency to exaggerate facts or confabulate? 48
- 14.3.29 Appear to be always optimistic and hopeful about the future? 49
- 14.3.30 Show a very marked capacity to endure stress? 50
- 14.3.31 Show dependability, loyalty, and reliability in social relations? 51
- 14.3.32 Demonstrate marked independence and autonomy in judgements and decisions? 52

Please write in a brief narrative of your impressions of the patient's premorbid personality (optional):

APPENDIX 5
PUBLICATIONS

Publications

Bhugra D., Leff J.P., Mallett R., Der G., Corridan B. and Rudge S. (1997): Incidence and outcome of schizophrenia in whites, Afro-Caribbeans and Asians in London; Psychological Medicine 27, 791-798

Submitted

1. Burnett R., Mallett R., Bhugra D., Hutchinson G., Der G. and Leff J.: Pathways into care. Psychological Medicine. (in press).
2. Bhugra D., Corridan B., Ridge S., Leff J. and Mallett R.: Social factors in Asians and whites. International Journal of Social Psychiatry. (in press).
3. Bhugra D., Mallett R. and Leff J.: Schizophrenia in ethnic minorities – a conceptual model of aetiology. International Review of Psychiatry. (in press).
4. Bhugra D., Hilwig M., Corridan B., Mallett R., Leff J. and Neehall J. (1998): Social demographic factors in schizophrenia: a comparison between African-Caribbeans in London and Trinidad. (Acta Psych Scand).
5. Bhugra D., Hilwig M., Corridan B., Neehall J., Mallett R. and Leff J.: Symptoms in schizophrenia in four ethnic groups. (Psychopathology).
6. Bhugra D., Hutchinson G., Hilwig M., Takei N., Fahy T., Neehall J., Mallett R., Leff J. and Murray R.: Pregnancy and birth complications in schizophrenia in Trinidad: a comparison with African-Caribbeans in London. (British Journal of Psychiatry).
7. Hutchinson G., Bhugra D., Mallett R., Corridan B. and Leff J.: Fertility and marital status in schizophrenia: first onset study. (Acta Psychiat Scand).

Incidence and outcome of schizophrenia in Whites, African-Caribbeans and Asians in London

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ABSTRACT

Background. Several previous studies have indicated high rates of schizophrenia in African-Caribbeans in the UK compared to White population.

Method. All people aged 18 to 64 years residing in two health districts in London who made contact with hospital or community services over a 1-year (Whites) or 2-year (ethnic minorities) period were screened for psychotic symptoms.

Results. One hundred and twenty-three patients passed the screen, of whom 100 were assigned a schizophrenic class by the CATEGO program. Of these, 38 were White, 38 African-Caribbean and 24 Asian. The incidence rate for broad schizophrenia was significantly higher for African-Caribbeans than for Whites. Asians showed a high rate among people age 30 and over, particularly women. Poor outcome at 1-year follow-up was significantly more common for African-Caribbeans than for the other two groups. The proportion of African-Caribbeans with a poor outcome was two and a half times greater than that of Whites. On a range of seven socio-demographic variables, African-Caribbeans differed from the other two groups only on unemployment.

Conclusions. A multitude of factors play a role in the aetiology of schizophrenia. Comparison of environmental factors in these groups may identify factors that contribute to the aetiology of schizophrenia.

INTRODUCTION

Epidemiological studies of the incidence of schizophrenia in ethnic minority groups in the United Kingdom have focused almost exclusively on African-Caribbeans. All studies have found a higher incidence of schizophrenia among African-Caribbeans than native Whites (Hemsi, 1967; Cochrane *et al.* 1977; Carpenter & Brockington, 1980; Dean *et al.* 1981; Littlewood & Lipsedge, 1981; Cochrane & Bal, 1987; McGovern & Cope, 1987; Harrison *et al.* 1988). The excess varies from 2.4 times the White rate to 18 times in a selected age group. A few studies have included Asian patients (Pinto, 1970; Cochrane *et al.* 1977; Carpenter & Brockington,

1980; King *et al.* 1994). The advantage of doing so is that the period of Asian migration to the United Kingdom roughly coincided with that of the African-Caribbeans, and they are subject to similar experiences of racial discrimination. On the other hand these two ethnic groups differ in language, religion, family structure and degree of adherence to traditional values. Comparison of the incidence of schizophrenia in African-Caribbeans and Asians in the United Kingdom consequently provides an opportunity to explore some of the hypotheses concerning the aetiology of this disease. Harrison *et al.* (1989) reported that only 12% of their Afro-Caribbean sample was unemployed, along with 21% being in the housewife/student/not available/not known categories.

In studies conducted before 1991, estimation of the population denominator was indirect. In

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the 1991 census, for the first time respondents were asked to provide a self-ascription of ethnicity, allowing a direct calculation of the denominator. A recent study (King *et al.* 1994) used these census data and also included a small group of Asian patients. The study was conducted for just 1 year in a single health district in London, namely, Haringay, which contains one of the largest Black communities in England and Wales. In spite of their small number of Asians ($N = 7$) these authors concluded that the rates of schizophrenia were high among all migrant groups.

We report a study with a very similar design, but in which ethnic minority patients were collected over 2 years from two health districts in order to generate sufficiently large numbers to conduct analyses by ethnic group and other variables of interest.

METHOD

The two health districts in London chosen for the study were Ealing, because of the large proportion (19%) of Asians there with 10% of Black ethnicity, and South Southwark and East Lambeth, which contains a large proportion (13%) of African-Caribbeans. These districts were chosen because of their similarities in socio-economic and population profiles. Both health districts have broadly similar rates of socio-economic deprivation on the Jarman Index. Between 1 April 1991 and 31 March 1993 all patients aged 18 to 64 who had resided in the catchment areas and who made a first contact with the following services were screened: general practitioners, community psychiatric nurses, prison services, private hospitals, out-patient and in-patient services, domiciliary consultants, and emergency services. The hospital contacts were screened three times a week, GPs, community services and domiciliary consultations every week, and the rest on a regular once a fortnight or once a month basis. The screening instrument used was the psychosis screen developed by the World Health Organization (WHO) (Sartorius *et al.* 1986; Harrison *et al.* 1988), which casts a wide net for possible cases of psychotic illnesses. These criteria included at least 6 months' residence in the catchment area, evidence of at least one of the overt psychotic symptoms or two of the abnormalities suggestive

of psychotic disorder, first life-time contact with any helping agency, and exclusion criteria included organic cerebral disorder (including drug or alcohol abuse) and previous contact with psychiatric services. Suitable patients who might have made contact with services outside the catchment areas were sought by monitoring the data systems for adjacent health districts. Patients from all ethnic minority groups were included throughout the 2 years of the study, while White patients from Ealing were included only for the first year because of their larger number. No White patients from the other health district were included since several studies have already looked at these, including the International Pilot Study of Schizophrenia (WHO, 1973).

Permission for the study to proceed was obtained from the three ethical committees concerned and each patient gave informed consent. Patients were also asked to consent to their relatives being interviewed: in a few instances this was withheld.

Assessments

Patients

Patients who passed the initial screening were approached for a psychiatric assessment with the Present State Examination (PSE) (Wing *et al.* 1974) Asian patients whose knowledge of English was poor were interviewed in Hindi or Punjabi by D.B. (an Indian-born psychiatrist). PSEs were carried out in Hindi or Punjabi according to the patient's preference. These translations had been previously validated in these two languages for both IPSS and Determinants of Outcome Studies (Jablensky *et al.* 1992). African-Caribbean patients in South Southwark and East Lambeth were interviewed by a White English-born psychiatrist (J.L.) with experience of interviewing patients in the Caribbean. Whenever possible the PSE was given within the first week of contact. A small proportion of patients had been discharged, or were seen on home visits, or had lost contact before they could be interviewed. In these cases a Syndrome Check List (Wing *et al.* 1974) was completed from the case notes.

Relatives

After obtaining the patient's consent, the nearest relative (usually the mother) was interviewed to

confirm and supplement information obtained from the patient. The Psychiatric and Personal History Schedule of the WHO was used to obtain data from the key informant about pre-morbid personality, past developmental and psychiatric histories.

Ethnic group

Patients and relatives were asked to assign themselves to an ethnic group using the categories developed for the 1991 census. One patient whose parents were from two different ethnic backgrounds (who had identified himself as other – mixed group) was excluded from calculations of incidence because of difficulty in obtaining an accurate population denominator from the census data. In two other cases of mixed parentage, patients assigned themselves to the Black group. These were left in the final calculations because ethnicity was self-assigned as in the census and we used the exact same categories. This may have been easier allocation for patients and their relatives because of their relatively recent experiences in the census procedures.

Psychiatric diagnosis

The CATEGO program (Wing *et al.* 1974) was applied to the data from the PSE and the Syndrome Check List to provide comparability with the diagnostic categories used in the WHO studies. This computerized algorithm assigns patients to diagnostic classes by aggregating items into syndromes and then applying a hierarchical set of rules. The narrowest category of schizophrenia is represented by class S+, which is assigned to patients with at least one of Schneider's (1959) first-rank symptoms. The broadest category also includes classes S?, P+, P?, O+ and 0?

Outcome

Patients were monitored closely over a 1-year follow-up period. If a recurrence of psychotic symptoms was suspected, a repeat PSE was conducted when possible. Occasionally, re-admitted patients were not given a PSE for various reasons, in which case the Syndrome Check List was rated from the case-notes. Patients and, when possible, relatives were administered the batch of schedules at a 1-year follow-up. Particular attention was paid to the

course of psychiatric symptoms over the intervening year. Additional information was obtained from the patients' GP wherever required. Relapse was defined as the recurrence of psychotic symptoms in patients whose psychosis had resolved, or the exacerbation of persisting psychotic symptoms, as suggested by the WHO criteria. Where the patient had lost contact with secondary care services, efforts were made to collect information from other sources such as GP notes and telephone contact with relatives or the patients themselves.

Analysis

The chi-square statistic was applied to the sociodemographic data for differences in proportions, and was also used to test for differences in incidence rates. The contribution of various factors to the relapse rates was analysed by linear logistic modelling with the GLIM program (Numerical Algorithms Group, 1986).

RESULTS

The sample

Of more than 900 admissions, and another similar number contacted the community mental health centres, a total of 123 patients passed the psychosis screen during the period of the study; 46 Whites, 46 African-Caribbeans and 31 Asians. In the first instance, the case-notes and referral letters were screened for all the first contacts in discussion with the team, the GP or CPNs looking after the patients. This reduced the numbers for screening. Only after confirmation of the first contact and their symptoms had been obtained, the individuals were approached. At this point, if all the criteria were fulfilled, the patients were taken through their PSE. Even after reaching this stage we discovered that four patients had been included who had previously sought treatment with psychological, psychiatric or general practice services or not found to be psychotic on the PSE and were excluded. We were not testing the specificity or sensitivity of the screening instrument as it had already been established by the WHO studies.

Of the total included, six were never admitted to hospital and were treated on a domiciliary basis. Two were admitted subsequently. Of these, the Asians were more likely to have been seen on home visits. Only one African-Caribbean

Table 1. Sociodemographic data for patients with schizophrenia

	White (N = 38) N (%)	African-Caribbean (N = 38) N (%)	Asian (N = 24) N (%)	df	χ^2	P
Gender						
Male	26 (68.4)	28 (73.7)	11 (45.8)			
Female	12 (31.6)	10 (26.3)	13 (54.2)	2	5.33	> 0.05
Age						
18-29	21 (55.3)	26 (68.4)	6 (25.0)			
30-64	17 (44.7)	12 (31.6)	18 (75.0)	2	11.26	< 0.00
Married	6 (15.8)	5 (13.2)	12 (50.0)			
Single/div/wid	32 (84.2)	33 (86.8)	12 (50.0)	2	13.07	< 0.00
Unemployed	21 (55.3)	31 (81.6)	12 (50.0)			
Employed	12 (31.6)	5 (13.2)	5 (20.8)			
Student/h.wife	5 (13.2)	2 (5.3)	7 (29.2)	4	12.01	< 0.01
Born in UK	35 (92.1)	27 (71.1)	3 (12.5)			
Born elsewhere	3 (7.9)	11 (29.0)	21 (87.5)	2	41.96	< 0.00
Education						
Prim/Secondary	33 (86.8)	31 (81.6)	19 (79.2)			
Tertiary	5 (13.2)	7 (18.4)	5 (20.8)	2	0.70	> 0.1
Living alone	10 (26.3)	13 (34.2)	3 (12.5)			
Living with family	28 (73.7)	25 (65.8)	21 (87.5)	2	3.61	> 0.1

patient came through the primary care services. The pathways into care are being analysed using the Personal and Psychiatric History Schedule data and will form a separate paper.

Of the total sample, PSEs were conducted on 85 patients and Syndrome Check List on the rest. Basic sociodemographic details did not differ between these two groups.

The data from these patients' PSEs and Syndrome Check Lists were processed by the CATEGO program. Any patient with an S, P or O class was included in a broad grouping of schizophrenia. Henceforth, this would be called broad schizophrenia in this paper. The number of patients with a diagnosis of affective psychosis within each ethnic group was too small to produce a reliable incidence rate. Therefore, these data are not presented here.

Sociodemographic data

Data for the 100 patients with a schizophrenic diagnosis are presented by ethnic group in Table 1. Significant differences between the ethnic groups were found for four of the seven variables. For three of these factors the White and African-Caribbean patients resembled each other closely, whereas the Asians stood out as being different. Specifically, the Asians had a preponderance of people aged over 30, the great majority of them were born abroad, and half of them were married compared with much smaller

Table 2. Incidence rates per 10000 population for broad schizophrenia by age and sex

Age ...	Males		Females		All patients 18-64
	18-29	30-64	18-29	30-64	
African-Caribbean	14.7	5.9	5.4	1.0	5.9
White	7.5	2.5	2.3	1.7	3.0
Asian	2.6	3.5	2.6	4.6	3.6

proportions of the other two ethnic groups. The exceptional factor is unemployment, affecting a much higher proportion of the African-Caribbean patients than of the other two groups, which were closely similar.

Incidence rates

The incidence rates per 10000 population aged 18-64 for broad schizophrenia by age (two groups) and sex are displayed in Table 2. We calculated incidence rates using age-standardization as well as with narrow age bands. Age-standardization is, of course, widely used and is an approach that we considered carefully. However, an overall age-standardized rate for each ethnic group would automatically adjust simultaneously for denominator and numerator. As our Asian sample showed higher age of onset we felt that these differences in the age of onset of distribution constituted important findings

but these could be obscured by age-standardization rather than clarified. The data were also analysed by splitting the age range split into four groups and the findings remained the same, but some cell sizes were too small for useful rates to be calculated from them. Rates were calculated on the basis of S/Non-S distinction, but as these did not show any significant ethnic differences and were otherwise as expected, their discussion has been omitted. The annual incidence rates for both unstandardized and age-standardized (using age bands 18-29, 30-39, 40-49, 50-59 and 60-64) are shown in Table 3.

Rate ratios and their 95% confidence intervals for the age standardization rates were: African-Caribbean:White 1.7 (1.11 to 2.78); African-Caribbean:Asian 1.38 (0.81 to 2.33); Asian:White 1.28 (0.76 to 2.14). This would suggest that the only significant difference lies between the African-Caribbean and the White groups. Even this difference is smaller than reported in most other studies. However, comparison of overall standardized rates can be misleading when there are differences in the component age specific rates.

In order to deal with the problem of under-enumeration of adult, especially ethnic minority,

males we followed the guidelines recommended by OPCS in the Census User Guide (OPCS, 1991) to calculate an adjusted denominator, which has been used for all the incidence rate calculations.

Linear logistic modelling was used to analyse the corresponding numbers. We used the same modelling approach over the use of summary statistics following Breslow & Day's (1987) recommendations. Table 4 shows age and sex specific rates in two broad age groups along with the numbers of cases and population bases used to calculate the rates. We decided to use age 30 as the cut-off point because previous studies have suggested that a majority of onset of cases occur in this age group. These numbers were analysed by linear logistic modelling using the GLIM program. After allowing for age and sex, there was a significant effect of ethnic group ($G^2 = 7.88$, 2 df, $P < 0.02$). As can be seen from Table 4 the rate for African-Caribbeans is roughly twice that of the White group within three of the four age and sex subgroups and this is consistent with the overall rate ratio. Overall comparisons of the Asian and White groups could be misleading because the Asians have relatively higher rates for the older age group and for women. In the logistic modelling this is

Table 3. Annual incidence rates per 10000 population aged 18-64

	Crude rate	Age standardized
African-Caribbean	5.9	5.1
White	3.0	2.9
Asian	3.5	3.7

Table 4. Age and sex-specific rates

	Males		Females	
	18-29	30-64	18-29	30-64
African-Caribbean				
Rate per 10000	14.7	5.9	5.4	1.0
Number of cases	18	10	8	2
Population base	12285	16933	14768	20831
White				
Rate per 10000	7.5	2.5	2.3	1.7
Number of cases	16	10	5	7
Population base	21468	40605	22094	40600
Asian				
Rate per 10000	2.6	3.6	2.6	4.6
Number of cases	3	8	3	10
Population base	11755	22536	11553	21922

Table 5. Sociodemographic variables compared with the base population

	White %	African-Caribbean %	Asian %
Unemployment			
Patients	55.3	81.6	50.0
Gen Pop	11.6	21.9	15.5
Ratio	4.8	3.7	3.2
Born in the UK			
Patients	92.1	71.1	42.5
Gen Pop	83.4	60.0	40.6
Ratio	1.1	1.2	1.05
Living alone			
Patients	26.3	34.2	12.5
Gen Pop	20.0	24.0	8.0
Ratio	1.3	1.4	1.6
Marital status (Married)			
Patients	15.8	13.2	50
Gen Pop	49.8	33.7	67.7
Ratio	0.3	0.3	0.7
Student/HW*			
Patients	13.2	5.3	29.2
Gen Pop	36.4	28.6	34.6
Ratio	0.36	0.19	0.84

* Housewife.

Table 6. One-year outcome for patients with schizophrenia

Ethnic group	N	Poor outcome*
		N (%)
White	38	9 (24)
Asian	24	4 (17)
African-Caribbean	35†	21 (60)

* Relapse, still in episode of inclusion, or suicide.

† Three patients untraced.

reflected in significant interactive effects of ethnic group and age ($G^2 = 8.42$, 2 df, $P < 0.02$) and of ethnic group and sex ($G^2 = 8.42$, 2 df, $P < 0.02$).

Table 5 presents five of key sociodemographic variables compared within the three ethnic groups and the figures from the general population.

Follow-up

The findings of the 1-year follow-up are shown in Table 6. Patients whose first episode showed no remission, who improved and then relapsed within this period, or who committed suicide are included in the poor outcome group. These are the exact criteria used by the WHO in the Determinants of Outcome Study. The WHO Determinants of Outcome follow-up recorded relapse if the patient was still in the episode of inclusion, had committed suicide, had an incomplete remission or had more than one psychotic episode during the year with clear periods of remission. On half of the patients we were able to complete PSEs on follow-up and for the rest information was obtained from the patients or their relatives or their health care professionals. Follow-up information was obtained on 97 of the 100 patients, the three missing subjects all being African-Caribbean. It was not possible to assess the outcome blind to ethnicity. The impact of gender and other sociodemographic factors is being presented separately.

A linear logistic analysis of the outcome data was conducted using the GLIM program. Good versus poor outcome was the dependent variable. Independent variables tested were ethnicity, S/Non-S CATEGO class, gender, and unemployment. Ethnicity was found to exert the biggest effect, $G^2 = 15.33$, 2 df, $P < 0.0005$.

Unemployment had a significant effect when taken alone, but this disappeared after ethnicity was allowed for. Only gender still had a significant effect once ethnicity was allowed for, men having a worse outcome, $G^2 = 4.1$, 2 df, $P < 0.05$.

DISCUSSION

One of the possible criticisms of our study is that the data were collected from two different geographical areas. Although proportions of populations of ethnic minorities varied slightly the sociodemographic differences in the base population are not marked enough to make pooling of the data a problem.

Our results confirm previous studies in showing that African-Caribbeans in the United Kingdom are at greater risk of developing a first episode of schizophrenia than Whites. However, compared with all other studies, our data show the lowest differential, a two-fold excess, which may be partly attributable to the availability of a more accurate population denominator and the assessment of subjects with structured interviews.

A high incidence of schizophrenia was found in African-Caribbean males of all ages, but only in African-Caribbean females under the age of 30. By contrast, a high rate compared with that of the Whites was found only in Asians over the age of 30, and particularly in older females. Asian rates are generally lower than the African-Caribbeans but higher in females aged over 30. This is an intriguing finding not previously reported. Since these patients are older and married, we can only hypothesize that a different set of aetiological factors may be at play here. Our findings suggest that factors involved in the aetiology of schizophrenia operate differentially over the life cycle for the different ethnic groups studied. Comparison of the life styles of these groups by age and sex could provide pointers to the aetiological factors involved.

Although our follow-up data was collected after 1-year and not following the patients monthly by the research team as in the WHO studies, our 1-year follow-up data provide further evidence for the greater vulnerability of African-Caribbean patients since their relapse rate was significantly higher than that of the

White or Asian patients. Our findings are very similar to those of a retrospective case-note study of first admitted patients (Birchwood *et al.* 1992). The relapse rates in this study were Whites 30%, Asians 16% and African-Caribbeans 49%. Our finding that men with schizophrenia have a worse outcome than women is solidly established in the literature (Bebbington & Kuipers, 1994), but the influence of this factor in our data is much smaller than that of ethnicity. It is likely that the factors influencing relapse differ from those implicated in aetiology. In particular, it would be of obvious importance to monitor compliance with maintenance medication and after-care. Our findings underline the importance of studying differences between African-Caribbeans and Asians in their experiences of living in a majority White culture. Whereas King *et al.* (1994) found no significant differences in sociodemographic factors by ethnicity, this was probably a consequence of their small sample sizes, since we found major differences for four of the seven factors examined. For three of these the Asian subjects differed from the Whites and African-Caribbeans. Only one factor distinguished the African-Caribbeans from both the Whites and Asians; the proportion of unemployed patients. Unemployment is then a candidate factor to explain the excess incidence of schizophrenia in United Kingdom African-Caribbeans although here it is linked with relapse. This important relationship to the onset is currently being investigated in a follow-up study with matched controls. Harrison *et al.* (1989) had found unemployment rates of 12% – these differences may reflect two different time spans over which theirs and our data were collected – unemployment rates generally have been fluctuating. Secondly, these differences reflect different geographical areas. We believe that unemployment remains an important vulnerability factor for relapse and our matched population control data will allow us to look at this. Like the WHO Determinants of Outcome Study, we believe that the period of remission is related to the country of residence rather than ethnicity *per se*.

A genetic cause is unlikely because two epidemiological studies in Jamaica (Hickling & Rodgers-Johnson, 1995) and Trinidad (Bhugra *et al.* 1996) have not found the incidence of

schizophrenia to be raised. Therefore the research emphasis needs to be on environmental factors, both social and physical.

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