
Racism and Mental Illness in the UK

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1. Introduction

There is substantial evidence of differential outcomes for different racial and ethnic groups in many health, social and economic arenas in the United Kingdom today, ranging from disease prevalence and outcome, hiring and promotion in the labour workforce, to loan approvals in mortgage lending, to rate of arrest and detention in the criminal justice system. These disparities – and others – describe social conditions that most Britons believe deserve some measure of attention. To understand such conditions and to fashion appropriate responses, it is important to assess whether and how racism and racial discrimination, along with other factors, may contribute to observed disparities in mental health outcomes among racial and ethnic groups.

2. Race

The focus on measuring racial discrimination in this study raises an initial question of “what is race?” Defining race is a task far more complex than can be accomplished here. In fact, there is little consensus on what race actually means. The term “race” was used to distinguish populations in different areas on the basis of differing physical characteristics that had developed over time, such as the colour of skin, facial features, and other features (Zuckerman 1990).

2.1. Biological definition of race

Recently, genetics researchers have found evidence of genetic clusters that correspond to geographically similar populations and yield the kind of variations in phenotype that have been used to construct concepts of race. Recent developments in the fields of genetics and

evolutionary biology have prompted a renewed focus on identifying the biological basis of human behaviour as well as ascertaining the historical relationships among different populations (Graves, 2004). More important, developments in the structuring of an International HapMap, which maps clusters of genes, have revealed variations in strings of DNA that correlate with geographic differences in phenotypes among humans around the world (Olson, 2002). New genetic data has enabled scientists to re-examine the relationship between human genetic variation and 'race'. A review of the results of genetic analyses has shown that human genetic variation is geographically structured, in accord with historical patterns of gene flow and genetic drift (Jorde and Wooding 2004).

However, because they have been only partially isolated, human populations are seldom demarcated by precise genetic boundaries. Substantial overlap can therefore be seen to occur between populations, invalidating the concept that populations (or races) are discrete types.

In the meantime, race may in some cases provide useful information in biomedical contexts, just as other categories, such as gender or age, do. But the potential usefulness of race must be balanced against the potential hazards. Ignorance of the shared nature of population variation could lead to diagnostic errors or to inappropriate treatment. The general public, including policy-makers, may be seduced by typological thinking, and so they should be made aware of the genetic data that help to prove it wrong.

Race remains an inflammatory issue, both socially and scientifically. Fortunately, modern human genetics may deliver the salutary message that human populations share most of their genetic variation and that there is no scientific support for the concept that human populations are discrete, non-overlapping entities. Although not all scientists are in agreement (Crow 2002; Mayr 2002), many critics deny that meaningful distinctions among contemporary human groups can be derived from a notion of race based upon biology (Cavalli-Sforza 2000; Omi 2001). To date, science has not identified a set of genes that correspond with social conceptions of race.

It may be argued therefore that race is not a naturally occurring phenomenon. The belief in race as a biological concept struggles to withstand scrutiny on at least two bases. First, genetic differences between population groups may not support the belief that there are genetic differences that justify racial groups (Nei & Roychoudhury 1983). There appear to be genetic differences among groups of people but these population groupings are not the same as racial groupings. The genetic distinctiveness of population groups appears to be a function of geography more than anything else. But racial categorization is not and could not be based upon geography. Population groups that "belong" to different racial groups may be very similar genetically, whereas population groups that "belong" to the same racial group may be relatively dissimilar, genetically speaking.

Secondly, physical differences among racial groups do not appear to reflect genetic differences (Nei & Roychoudhury 1983). Genotypic differences are not reliably mirrored by the differences in phenotype upon which racial group membership is largely based. The physical differences that signify race do not correlate with the genetic differences on which the bio-

logical claim for racial categorization appears to rest. Even if genetic variation justified a concept of race, our demarcation of racial groupings based on physical features does not seem to correspond to the underlying genetic differences.

2.2. Social construction of race

Race may be better regarded as a social construction. A century earlier, belief in the biological basis of racial categorization obscured this notion. Now, however, the biological bases of race have been widely questioned (Lewontin et al 1984). From the standpoint of biology, there appear to be no races. Yet, race continues to be among the most meaningful of social categories. From the standpoint of social psychology and psychiatry, race is among the most interesting and important of social phenomenon.

Recent behavioural and social research supports the social-cognitive notion that race is a construct that is based upon observable physical characteristics (such as skin colour) that have acquired socially significant meaning. In addition to physical features, ascribed and other characteristics such as given name, diet and dress may also contribute to categorizations of race. Cultural factors, such as language, religion and nationality, have more often been used in reference to ethnicity – that is, groups of people who share a common heritage, such as various European immigrant groups in the United States (Bobo 2001).

Historically, physical appearance has been the identifiable, surface characteristic on which racial categorization has been based. Physical features such as complexion, hair, lips, nose, and body-type have been central to determining race. The “deeper” properties of race are considered to be comprised not only of a biological essence (such as DNA), but also of psychological and status characteristics as well. Beliefs about those deeper properties constitute the essence of racial categorization. The psychological characteristics of race included factors such as racial sentiments, instinct, affinities, proclivities, and moral character. The social status characteristics include the general (e.g., dominant vs. subordinate) and the specific (e.g., master vs. slave) roles that racial groups often occupy in society relative to one another. Biological conceptions of race often, but not always, underpin beliefs in race-based psychological and social status characteristics.

Although both psychological and social status characteristics may be thought of as the deep properties of race (and therefore as part of the essence of the categories), features of social status (i.e., which roles particular racial groups occupy in society) may be believed to naturally follow from psychological characteristics (Yzerbyt et al 1997). Black African-Caribbeans’ often-low status in contemporary times, for example, may be thought to result from an aversion to hard work.

Disparate physical features including hair, complexion and bone structure become understood, through the lens of racial essence, as similar. Some characteristics but not others become salient because they are assumed to signify race. Related to this, surface features such as skin colour and hair texture, according to this view, signify internal qualities of an individual. As suggested by Allport (1954), “[dark] skin implies more than pigmentation, it im-

plies social inferiority". Far from merely contributing to appearance, surface features point toward the unseen moral, psychological, or intellectual properties of race.

2.3. The ambiguity of race

As a social cognitive construct, the meaning of race in the United Kingdom has changed and is likely to continue to change over time with changing socio-political norms, economic patterns and waves of immigration (e.g., the growing acknowledgement of mixed-race origins in the twenty-first century). Population groups and individuals vary in their consistency of reporting race when comparing surveys across time and with each other. For example, because country of birth is recorded on death certificates and in census data, much of the published data in this area has allocated race according to country of birth, a strategy that is clearly inadequate. In addition, many studies have used categories such as Black or South Asian to describe the ethnicity of those studied.

Some people believe self-identification is the only reasonable method to use because it allows people to express their own racial identity. Another alternative is largely to ignore the role of self-perceived ethnicity and to assign racial category according to family origin (Nazroo 2001). Unsurprisingly, perceived racial group and country of family origin have been found to be highly related. Harris (2002) argues that the classification of race is a social process that varies across contexts and observers. To determine an individual's race, people may use one or more ancestry or biological bases, phenotypic or physical characteristics, and cultural bases, such as ideology and language. Obtaining multiple indicators of racial identification would likely provide helpful data to inform racial classification and analysis.

Race should be part of a multi-dimensional construct of social status. Ideally, the construct should include: a) some measure of self-identification; b) a measure of group identity; c) a measure of social distance between the group that the individual belongs to and other groups; d) measures of social mobility; e) socio-economic status; and f) contextual variables of family and community.

2.4. Race and ethnicity as a variable in research

Ethnicity has been used increasingly as a key variable to describe health data, further stimulated by ethnic monitoring in the NHS. Senior and Bhopal identified four fundamental problems with ethnicity in epidemiological research – the difficulties of its measurement; the heterogeneity of the populations under study; the lack of clarity about the purpose of the research; and ethnocentricity affecting the interpretation and usage of the data (1994). They have suggested how the value of ethnicity as an epidemiological variable may be improved: ethnicity should be differentiated from race; ethnicity's complexity and fluidity should be acknowledged; ethnic classifications should be more explicit and their current limitations set out; investigators should recognize the potential influence of their personal values and ethnocentricity upon research and policy-development; socio-economic differences should not be ignored; and the relative importance of environmental, cultural, lifestyle and genetic influences should be factored in to the analyses of difference.

3. Racism

Race has been described earlier as a social-cognitive construct that evolves over time and in which racial categories reflect the person's ancestors' physical features and associated characteristics that have acquired social meaning. Racism may be defined as a belief or doctrine that inherent biological differences among the various human races determine cultural or individual achievement, with a corollary that one's own race is superior and has the right to rule others. When racism, the belief, is applied in practice, it takes forms such as prejudice, discrimination, segregation or subordination. Racism can more narrowly refer to a system of oppression, such as institutional racism. Organizations and institutions that put racism into action discriminate against, and marginalize, a class of people who share a common racial designation. The term racism is usually applied to the dominant group in a society, because it is that group that has the means to oppress others. The term can also apply to any individual or group, regardless of social status or dominance. Racism can be both overt and covert. Individual racism sometimes consists of overt acts by individuals, which can result in violence or the destruction of property. Institutional racism is often more covert and subtle. It often appears within the operation of established and respected forces in the society, and frequently receives less public condemnation than the overt type.

3.1. Racial attitudes

Covert, less obvious aspects of racism are often contained within people's beliefs and attitudes about different races. Although attitudes are more difficult to evidence, it is important to register their presence and attempt to measure them because attitudes may influence behavioural inequity towards different racial groups, and attitudes to racism are often considered no less important than overt acts of racism by the recipients of racial discrimination. There is evidence that negative stereotypes about minority groups are declining. In addition, this apparent increased tolerance extends beyond blacks to other racial and ethnic minority groups as well (American National Election Survey 1995). Despite these trends in the intergroup attitudes of the white majority in the west, there are still reasons for concern. 32% of blacks reported that discrimination is the primary obstacle to achieving equality in the United States (Anderson 1996). Furthermore, despite dramatic improvements in the expressed racial attitudes of whites over time, racial disparities persist. US data shows that gaps between blacks and white Americans in infant mortality, life expectancy, employment, income and poverty have continued to exist; and, in many cases, these disparities have actually increased over the past few decades.

3.2. Aversive racism

Aversive racism represents a prevalent type of modern racial bias which researchers feel is important but often hard to identify (Gaertner et al 1997). In contrast to "old-fashioned" racism, which is expressed directly and openly, aversive racism is a subtle, often unintentional form of bias that characterizes those who possess strong egalitarian values and who believe that they are not prejudiced. Aversive racists are also felt to possess negative racial feelings

and beliefs of which they are unaware or that they try to dissociate from their non-prejudiced self-images. The negative feelings that aversive racists have for blacks do not reflect open hostility or hate. Instead, their reactions are found to involve discomfort, uneasiness, disgust, and sometimes fear. That is they are found to regard blacks as "aversive", while, at the same time, they find any suggestion that they might be prejudiced aversive as well.

3.3. Racial microaggressions

An equally subtle yet significant form of racism developed by the US psychiatrist Chester Pierce is the concept of microaggressions (1974). Microaggressions are subtle insults (verbal, nonverbal, and/or visual) directed toward people of colour, often automatically or unconsciously. In and of itself a microaggression may seem harmless, but the cumulative burden of a lifetime of microaggressions can theoretically contribute to raised morbidity and flattened confidence. Little is known about microaggressions, and yet this subtle form of racism is reported as having a dramatic impact on the lives of African Americans. Pierce and his colleagues have defined racial microaggressions as "subtle, stunning, often automatic, and nonverbal exchanges which are 'put downs' of blacks by offenders" (Pierce et al 1978, p. 66). They further maintain that these "offensive mechanisms used against blacks often are innocuous" and that the "cumulative weight of their never-ending burden is the major ingredient in black-white interactions" (p. 66).

3.4. Racial discrimination

A social science definition of racial discrimination may be best used for the purposes of this study. This includes two components: (1) differential treatment on the basis of race that disadvantages a racial group and (2) treatment on the basis of inadequately justified factors other than race that disadvantages a specific racial group (differential effect). Each of these components is based on behaviour or treatment that disadvantages one racial group over another, yet the parts differ on whether the treatment is based on an individual's race or some other factor that results in a different racial outcome.

It is important that research into racial discrimination encompasses categories that include behaviours and processes which are either not explicitly unlawful or not effectively prohibited because of difficulties in measurement or proof. This is in order to capture as true a picture of the experience of racial discrimination for the individual as possible. For example, subtle forms of discrimination which might not be susceptible to legal challenge but fall within this definition include when interviewers of job applicants more frequently adopt behaviours (e.g., interrupting, asking fewer questions, or using a hectoring tone) that result in poor communication and consequently poorer performance by disadvantaged minority ethnic applicants as compared with other applicants. Even though it may be more difficult to prove legally, such subtle discrimination in theory constitutes actionable disparate treatment discrimination.

This definition of racial discrimination is based on behaviours and practices, and as such it differs from a definition that also includes prejudiced attitudes and stereotypical beliefs.

Discriminatory behaviours and practices may arise from prejudice and stereotyping, but prejudice need not result in either differential treatment or effect. Similarly, whereas discriminatory behaviour in many domains is unlawful, prejudiced attitudes and stereotypical beliefs are not.

4. Measuring racial discrimination and its effect upon health

Because discriminatory behaviour can rarely be directly observed, researchers face the challenge of establishing when racial discrimination has actually occurred and whether it explains some portion of a racially disparate outcome. Those who attempt to identify the presence or absence of discrimination typically observe an individual's race (e.g., black) and a particular outcome (e.g., health status) and try to determine whether that outcome would have been different if the person had a different racial origin (e.g., white).

Establishing that racial discrimination did or did not occur requires causal inference. Identifying a racial disparity and determining that an association between race and an outcome remains after adjusting for plausible confounding factors is relatively straightforward. The real difficulty lies in going beyond the identification of an association to the attribution of cause. Ultimately, researchers must rely upon the evaluation of evidence from multiple studies - whilst considering the strength of association, consistency, and plausibility of each study's design and findings - to draw conclusions about causality.

4.1. The challenge of direct measurement of racial discrimination

Legislation passed in the twentieth century both in the UK and the US have made open discrimination on the basis of race or ethnicity illegal, and perpetrators can be prosecuted under both criminal and civil law. Although readily observable acts of discrimination have declined, the persistence of high levels of residential segregation along racial lines and large racial gaps with respect to income, wealth, and other societal outcomes indicate the continued existence of racial discrimination albeit in new forms, that are not as easily identifiable but may be damaging nonetheless (Krieger 2000).

Surveys provide valuable evidence for understanding the extent of discrimination, but they cannot directly measure its occurrence. They tend to measure self-reported attitudes, perceptions or experiences of discrimination which may be unreliable for two main reasons. First, if a discriminatory occurrence is ambiguous, a minority ethnic respondent may misreport its incidence with more subtle forms of discrimination not as easily detected. Secondly, white respondents are often not willing to admit to practising or supporting discriminatory actions, which leads to inaccurate reporting of their true beliefs or attitudes.

There is increasing support for a life-course approach to measuring the effects of discrimination on the individual's outcome with development of theories of cumulative disadvantage over time (Jacobsen et al 2001). Longitudinal studies lend themselves to this approach; they analyze the incidence, causes and consequences of changes in attitudes about race and expe-

periences of racial discrimination at the level of the individual. Their approach is very valuable, although there is a dearth of such work primarily owing to its difficult and costly methods.

4.2. Indirect measurement of health effects of racial discrimination

This approach acknowledges that discrimination may be difficult to measure and thus compares health outcomes of “dominant” and discriminated-against racial groups. An example of this approach is the EMPIRIC (Ethnic Minority Psychiatric Illness Rates) study, which examined common mental disorders and ethnicity in England (Weich et al 2004).

If any obtained differences in outcome cannot be wholly explained by known risk factors (i.e., by statistical adjustment), it may be inferred that the residual difference could be explained by racial discrimination (Krieger et al 1993). It is usually postulated that socio-economic status is the main confounder for such health outcome differences. If a residual difference remains after adjusting for socio-economic status, four alternative explanations may be put forward.

Firstly, socio-economic position has been inadequately measured, which accounts for the residual confounding. Secondly, an intermediary, economically-unrelated variable such as psychological distress has led to the disparity in health outcomes. A third explanation is that unexplained differences are explained by unmeasured factors associated with race and the outcomes have not been accounted for, i.e. unknown confounders (such as culturally-shaped dietary patterns). The final possibility is that of genetic differences between races explaining the residual difference in outcome.

Existing research relying upon indirect strategies to measure the health effects of racial discrimination are able to address both the health effects of types of discrimination not readily perceived by the individual (such as the treatment decisions of clinicians), and whether economic disparities can explain the health differences that may occur between racial groups. These methods are not able to measure direct experiences of racial discrimination, nor can they investigate effects related to intensity, duration, or period of exposure to any discrimination.

4.3. The measurement of perceived racism versus objective racism

Research investigating the untoward effects of racism is on the rise. As the empirical literature exploring the associations between racism and health emerges, the development of an equally strong theoretical literature is needed to explain the pathways through which racism may influence health outcomes. Equally, attention should be given to assessments of racism that are reliable and valid.

Although research suggests that perceptions of events as stressful are more predictive of psychological and physiological functioning than objective demands, comparative research exploring the relationship between a person’s perceptions and objective demands may provide additional concurrent validity. Further research is also needed to more clearly interpret

observed findings with respect to perceived racism. For example, for some people who perceive stimuli as involving racism probably do so because it is less anxiety-provoking than attributing the failure of being say, promoted at work, to personal deficits. Furthermore, some people who do not report perceiving racism probably fail to do so because of denial or as an attempt to avoid the expected psychological distress that would be associated with negotiating an uncontrollable stressor. Accordingly, in addition to assessing the perceptions of racism, the simultaneous measurement of other contributory factors such as attributional style, impression management, self-deception, and affective state would help to delineate the possible mitigating effects of these variables.

Measures used to assess racism should: be reliable and valid for the target groups and subgroups as well as ethnic-gender groups and subgroups being studied; be specific enough to capture the reported multidimensional nature of racism; and be developed with equivalent shorter and longer versions to facilitate use with different study designs.

Notwithstanding this, it is important to note that perceived racism need not be any less significant than objective racism, or an observer-related account of the same racist event. The individual's subjective experience of a putatively racist event is more significant to that individual than some third party account of the same occurrence. Therefore, one might argue, that little may be gained by measuring objective racism rather than perceived racism if it is the latter that holds greater significance and possible predictive ability in terms of prognosis or health outcome.

4.4. Measuring self-reported experiences of racial discrimination and its health effects

A relatively new approach in determining the health effects of racial discrimination is by determining people's direct experiences of discrimination and their relation to health status. The most common outcomes of these studies have been mental health (e.g., depression, psychological distress) and hypertension or blood pressure. The main problem with this approach is a lack of standardization in measuring self-reported experiences in terms of: length, intensity and frequency of exposure; domain of exposure (e.g., global or specific situations); and the targets of discrimination (e.g., individual family members or the family unit as a whole); reactions to racial discrimination.

Empirical studies adopting this approach have tended to focus on the racial attitudes of those who discriminate and used qualitative, in-depth techniques rather than methods that are easily interpretable by epidemiological methods.

There are four factors which may mean people experiencing the same discriminatory "exposure" would report them differently. The notion of "internalized oppression" adopted by some oppressed group-members and a sense of their subordinate status being in some way "deserved", may lead to an under-statement of an actual discriminatory act (Meyer 1995). Secondly, the notion of "social desirability" leads to people shaping their responses according to the perceived status of the interviewer. Thirdly, individuals may exaggerate discriminatory experiences (system-blame) to avoid blaming themselves for failure (Neighbours et

al 1996). Finally, the cognitive effects of depressive disorder may lead to overstating or magnifying a discriminatory environmental event.

Researchers have attempted to circumvent the issue of self-presentational biases impairing the self-report of racial discrimination by the use of implicit rather than explicit measures of discrimination. The Implicit Attitudes Test is a computer-measured task which measures response speeds to racially-charged imagery to compute unconscious racism measures rather than through explicit questioning (Greenwald et al 1998). A related approach to avoid such biases would be to incorporate questions to assess identity formation, political consciousness, stigma and internalized oppression.

4.5. Measuring population-level experiences of racial discrimination and their health effects

Racial discrimination measured at a population-level is being increasingly measured in research to see if it relates more closely to population health than individual-level measures of discrimination (Kennedy et al 1997). Although this work is in its infancy, promising measures of population-level indicators of discrimination are: economic segregation of neighbourhoods; occupational segregation of jobs by race/ethnicity and gender (Rothenberg 1988); voting rates and registration of different dominant and subordinate groups; and socio-demographic composition of subsidiary branches of Government, such as the judiciary.

Concerns related to this particular approach to research are that of the aetiological period and the ecological fallacy. With regards to the aetiological period, the issue is making appropriate distinction between the effects of acute and cumulative exposures, and between outcomes with short and longer latency periods. It is harder to infer causality from a potentially aetiological agent when the latency period is longer, the agent far-removed in time, from the outcome. The ecological fallacy centres on whether causal inferences at the population level are valid at the individual level. This fallacy results from confounding introduced through the grouping variable (e.g., city, nation) used to define the group-level dependent and independent variables. It has been suggested that the ecological fallacy could be minimised by population-level measures of discrimination meaningfully combined with individual-level measures through techniques of multi-level analyses (Williams 1997).

5. Racism, physical and mental health

The relationship between racism and both physical and mental health is a complex one. In Figure 1, a framework is provided to understand the relationship between racism and health; the arrows indicate associations. It can be seen that racism is a major societal force that affects health status. At the societal level, racism within medical institutions could affect minority health status through the organisation of medical services. There are large differences in access to medical care and receipt of medical procedures between racial groups in the US (Franks et al 1993; Giles et al 1995), which is likely to affect prognosis and outcome. If racism is so embedded in social and cultural institutions, race-related risk factors and re-

sources such as racial beliefs and racial bias are likely to be important influences upon health.

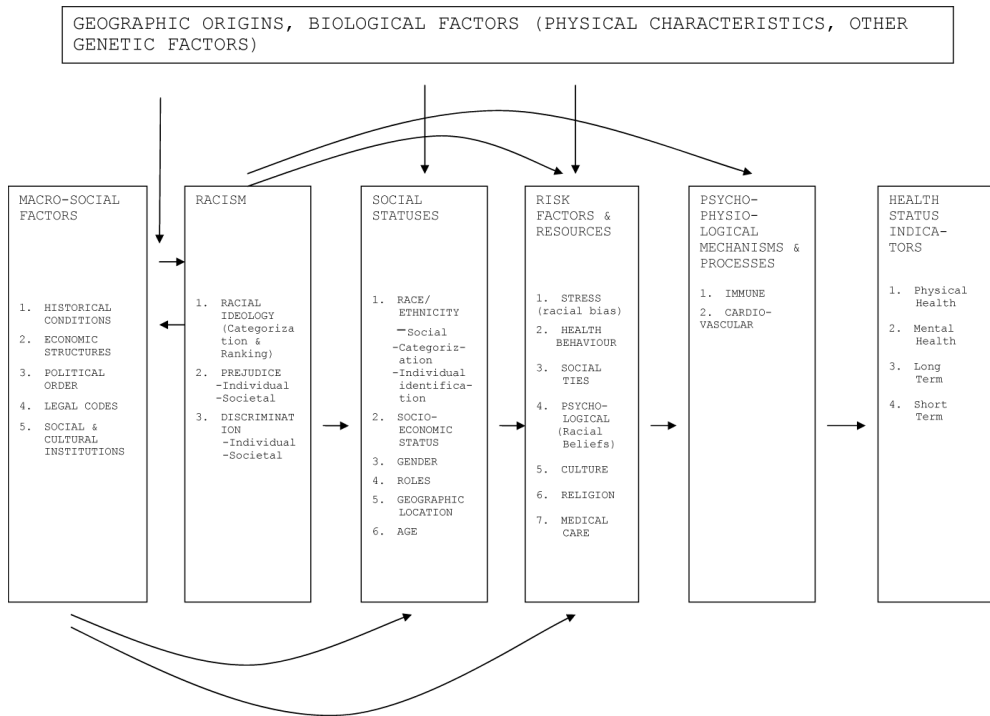


Figure 1. A framework for understanding the relationship between race and health (Williams 1996).

Literature suggests that internalisation of society’s negative cultural stereotypes about a racial group by members of that group can lead to worsened health status. African Americans that do so have been shown to have elevated rates of substance misuse and physical and mental illness (Williams & Chung 1995).

Economic institutions are thought to play a powerful role in affecting health status along racial lines. Researchers have argued that there is disproportionate targeting of minority ethnic consumers by the tobacco and alcohol industries leading to over-consumption and worse health (Bryant & Mohai 1992). Residential segregation is an important potential mechanism perpetuating health differences between races. Racism enacted at an institutional level through financial institutions (banks, mortgage lenders) may create and sustain a social status that results in differential housing. And once in place, such segregation restricts employment opportunities, thus socio-economic mobility and the individual’s situation worsens. When considering this notion, it is striking that there has been little report of any

decline in the level of racial segregation in African Americans over time (Farley & Frye 1994).

Experiences of racial bias at the individual level may have deleterious consequences by acting as a negative stressor (Thoits 1983). The stress literature suggests that the persistence of a difficult situation and its resolution, or lack of it, are important determinants of its adverse impact. To elucidate more clearly the effects of racism as a stressor, there needs to be a greater understanding of the way in which racism combines with other sources and types of stress, as well as the identification of intervening variables that may moderate or mediate the effects of stress on health (coping factors, personality types etc). For example, Lazarus and Folkman (1984) have researched stress in relation to coping and noted that both the subjective evaluation of the seriousness of an event as well as coping responses determine whether a psychological stress response will follow. This may be useful in the development of a model including racism as an environmental stressor.

5.1. Racism and physical health

A recent excellent systematic review of self-reported racism and health is the main source for the information in this section (Paradies 2006). That source reviewed 138 empirical quantitative population-based studies of self-reported racism and health, each study often determining several outcomes and associations. The study designs included were cross-sectional, cohort, experimental and case-control in nature, with the majority (73%) of significant associations determined in cross-sectional studies; this of course limits the inference of causality. However, 12% of the reported significant associations between racism and health outcome were found in longitudinal studies. A variety of ethnic groups were included: African American (most frequent); Asian; Latino; Whites and refugee groups.

The most consistent association found was that self-reported racism had an association with negative mental health outcomes on 72% of occasions. The association was found to be far weaker for physical health outcomes: the association between self-reported racism and worse physical health was only found 36% of the time, with no association found in 63% and a positive association (i.e., with better physical health) in 1% of the research. It is hypothesised that this weaker effect may be due to racism exert a lagged effect upon physical health, mediated by negative mental health outcomes.

The majority of physical health outcome studies examined the relationship between racism and blood pressure (Paradies 2006). 19 out of 79 occasions found self-reported racism was associated with elevated blood pressure, with no association found on 59 occasions, and with a negative association on one occasion. Furthermore, self-reported racism was associated with increased heart rate on five out of ten occasions. A possible pathway through which perceived racism may affect blood pressure is anger (Steffen et al 2003). Perceived racism has been related to higher levels of anger and hostility and large studies have found that African Americans tend to score higher on anger and hostility measures than whites (Scherwitz et al 1991). Paradies' review found a positive association between low infant birth-weight/decreased gestational age and self-reported

racism on 15 out of 27 occasions, which may be speculated to be associated with deprivation and poorer access to ante-natal services.

General self-reported health status was identified by Paradies (2006) as a common outcome when measured either as a global measure or through use of the instruments Short Form-12/36. A negative association between health status and self-reported racism was found on 19 out of 45 occasions.

In terms of health-related behaviours, Paradies identified a positive association between racism and increased cigarette smoking on four occasions, increased alcohol misuse on eight out of 14 occasions and increased drug misuse on five out of six occasions (2006). Possibly related to this, results from a national sample found that discrimination was related to an elevated mortality risks over a 13-year follow-up period among African Americans who had self-blaming as opposed to external attributional orientations (LaVeist et al 2001).

5.2. Racism and mental health

Mental health outcomes are the most frequently measured in relation to racism. An alternative theoretical framework to that outlined in Figure 1, linking racism to mental health has multiple, inter-related connections (Turner & Kramer 1995). These connections were divided into the following areas where racism may potentially exert an effect: the definitions of mental health and illness; aetiological theories of mental illness; the evaluation process (assessment and diagnosis); the provision of direct services; the organisation and structure of mental health institutions; and the training of mental health professionals and care providers.

Social class is often cited as a confounder of both ethnicity and poor health status: the inverse relationship between social class and mental illness is consistently reported. This association may be mediated by an increased exposure to, and vulnerability to, social stressors. It has been argued that minority status in itself is a source of stress, independent of social class. A related phenomenon is the "ethnic-density" effect: this is the observation that the incidence of schizophrenia in non-white ethnic minorities is greater when they comprise a smaller proportion of the local population (Boydell et al 2001). Those authors attributed this to a greater vulnerability to social stressors when an individual is a member of a small minority group rather than a larger minority group.

It has been argued that the psychiatric assessment process is undermined by racial biases and ethnocentricity. The argument is that owing to the development of most assessment and measurement tools within Western cultures, this limits their use in different ethnic or cultural groups, leading to a possibility that culturally-acceptable behaviour may be labelled as psychopathology. Cross-cultural clinical assessment is therefore increasingly favoured and researchers have developed a number of approaches to facilitate a more culturally informed assessment and tested these in medical students with success (Chakraborty et al 2009a).

With regards to minority ethnic access to psychiatric services, there is a problem of an inequity of service provision, thought to be linked to racism: minority groups being less likely to receive psychotherapy or counselling than their white counterparts; and the former being

more likely to receive oral or depot-injection pharmacotherapy and inpatient treatment; more likely to present to psychiatric services via an emergency pathway (the police or Accident and Emergency Departments) rather than through primary care or their families; more likely to be detained under the Mental Health Act; less likely to comply with management plans and remain linked with services (Chakraborty & McKenzie 2002).

Research and training issues are also thought to connect racism to mental ill health in a number of ways. If researchers were to bring racist attitudes, perspectives or values to their scientific enterprise the result could be attribution of inter-ethnic differences to “cultural deficiencies.” Secondly, racist research is poorly-conducted research; examples of this kind of poor research are: ignoring the cross-cultural validity of research instruments, neglecting to think about the impact of the ethnicity of the interviewer upon engagement with minority ethnic respondents, under-studying of phenomena in minority ethnic groups with transposition of findings from the dominant ethnic groups, labouring under the assumption that the findings are universally applicable. Similarly, training issues which could be relevant to the service-related inequities between ethnic groups may be the lack of experience acquired by mental health trainees in ethnically-diverse areas, and the relative scarcity of both clinical and academic senior mental health professionals from minority ethnic backgrounds (Turner & Kramer 1995).

Given the ever-expanding presence of minority ethnic groups in the west, the benefits of increasing the minority ethnic mental health workforce would be several: those minority patients whom were thought could benefit from an ethnically-matched therapist would be more likely to access one. Secondly, the increased presence of minority health professionals may be regarded by service-recipients as a clear sign that those services are, in reality, available to them, in turn making help-seeking seem less threatening and more acceptable. Finally, their presence may lead more majority health providers to think of cultural factors as important considerations, with cross-cultural work becoming more mainstream and routine, and less for the sake of “political correctness”.

A major and substantial study was a 13-year national panel study from 1979 to 1992, which revealed complex relationships between the experiences and perceptions of racism and the physical and mental health status of a sample of 623 African Americans (Jackson et al 1996). It found that reports of negative racial encounters over the 13-year period were weakly predictive of poor subjective well-being in 1992. A more general measure of racial beliefs – perceiving that whites want to keep blacks down – was found to be related to poorer physical health in 1979-80, better physical health in 1992, and predicted increased psychological distress, as well as lower subjective well-being in 1992. The authors concluded that cumulative perceptions of racism resulted in poorer mental health but, surprisingly better physical health. The latter finding could have been due to those respondents who perceive whites as wanting to keep them down being more vigilant when it comes to their own physical health; hence the better outcome.

Returning to Paradies’ review of the extant empirical evidence for associations between mental ill health outcomes and self-reported racism (2006), improved mental health was almost never found to be associated with increased racism. On 40 out of 62 occasions a posi-

tive association was found between self-reported racism and psychological/emotional distress, with no association on 21 occasions.

Depressive symptoms or frank depressive disorder were positively associated with racism on 39 from 52 occasions (Paradies 2006). Several models have explained this phenomenon, with the common pathway often identifying racial stress as both a vulnerability factor and a stressful life event. Community-based studies have found a higher prevalence of depression in minority ethnic groups than in the dominant population (Lloyd 1998; Shaw et al 1999).

Obsessional and compulsive symptoms were found to be associated with self-reported racism on five out of five occasions in different studies; however, it could be that this positive finding is artefactual and in fact due to improved recall of racist (as well as other) events in those with an obsessive tendency. Somatisation was found to have a positive association with self-reported racism on five out of five occasions (Paradies 2006). Anxiety symptoms were found to be positively associated with racism on 15 out of 22 occasions. Several stress models describe a relationship between threatening events and the onset of anxiety symptoms. Racial discrimination was found to be the crucial factor associated with high levels of anxiety in non-white immigrants to New Zealand (Pernice & Brook 1996).

Stress was found by Paradies to be associated positively with self-reported racism on 13 out of 22 occasions (2006). Psychiatric symptomatology following a racist threat or attack has been conceptualised by some researchers as a form of post-traumatic stress disorder – PTSD (Dassori & Silva 1998). Loo has described PTSD following race-related verbal and physical assaults, racial stigmatisation and the cumulative effect of racism as a trauma in an Asian group (1994). Other symptoms common to PTSD such as poor concentration, hyper-vigilance, avoidance and autonomic arousal have also been described following experiences of racism.

There is a dearth of empirical evidence considering the association between racism and psychosis. No studies were found by Paradies (2006), although a recent cross-sectional survey found an increased risk of psychosis in UK minority groups after adjusting for gender, age and socio-economic status (Karlsen et al 2005). This study (EMPIRIC) consisted of a multi-variate analysis of quantitative, cross-sectional data from a nationally-representative community sample of people aged between 16 and 74 years from the largest minority ethnic groups in England: those of Caribbean, Indian, Pakistani, Bangladeshi, an Irish origin. The researchers found that the experience of interpersonal racism and perceiving racism in the wider society each have independent effects on the risk of common mental disorder and psychosis, even after adjustment.

From the same dataset, authors examined perceived discrimination and its association with common mental disorders among workers in the United Kingdom (Bhui et al 2003). Discrimination was measured as reports of insults; unfair treatment at work; or job denial stemming from race, religion or language. The risk of mental disorders was found to be highest among ethnic minority individuals reporting unfair treatment and racism insults. The overall greatest risks were observed among Black Caribbeans exposed to unfair treatment at work and Indian, Bangladeshi, and Irish individuals reporting insults.

Furthermore, the EMPIRIC dataset permitted the examination of the examination between racism and mental illness in minority ethnic groups, using social support as a moderating factor (Chakraborty et al 2010). Social support was quantified as both the number of relatives as well as their geographical proximity to the individual. When quantified in either way, social support did not moderate the size of the association between perceived discrimination and mental illness. The finding that this association was not reduced by the supposedly “buffering” effect of familial social support, suggests that racism has a strong and pronounced effect.

A population-based incidence and case-control study of first-episode psychosis (Aetiology and Ethnicity in Schizophrenia and Other Psychoses (AESOP)) examined the cross-sectional association between ethnicity and psychosis and whether this was mediated by perceptions of disadvantage (Cooper et al 2008). The Black ethnic groups were found to have a higher incidence of psychosis. After controlling for unemployment, the association of ethnicity with psychosis was attenuated by perceptions of disadvantage. This suggests that perceived disadvantage is at least partly associated with the excess of psychosis among Black people living in the UK.

A second group has carried out a series of studies in the Netherlands, looking at the association between discrimination and the incidence of psychotic disorders. The first paper reports upon the incidence of psychotic disorders over seven years in The Hague, a city with a large and diverse minority ethnic population (Veling et al 2007). They found a dose-response relationship between discrimination and age- and gender-adjusted incidence rate ratios of both schizophrenic and all psychotic disorders in ethnic minority groups, suggesting that perceived discrimination might contribute to the increased risk of schizophrenia.

In their second paper, the group describes a case-control study of first-episode schizophrenia investigating whether perceived discrimination at the individual level is a risk factor for schizophrenia (Veling et al 2008). Cases reported somewhat higher rates of perceived discrimination in the year prior to illness onset than their siblings and the general-hospital controls, but these differences were not statistically significant. Therefore they concluded that perceived discrimination at the individual level was not a risk factor for schizophrenia in these data, although they concede that the relationship between racial discrimination and psychosis may vary with the aspect of discrimination that is studied, and may also depend upon the social context in which discrimination takes place.

An earlier UK study reported raised incidences of schizophrenia in all minority ethnic groups presenting to psychiatric services within a deprived, inner-city setting (King et al 1994). Racism has been attributed as a cause of illness by psychotic patients but the study was cross-sectional in nature, limiting an assumption about causality (Chakraborty et al 2009b).

Another study found that black and minority ethnic patients with psychotic illnesses reported no more life events than their white British counterparts, but they were more likely to attribute them to racism, potentially disinclining the minority patients from using services they perceive to be racist (Gilvray et al 1999). Societal racism has been mooted as a cause of

increased risk of schizophrenia in Black populations in the UK; and institutional racism, life events and chronic stress may also be associated with an increased risk of developing psychosis (Perera et al 1991).

Perceived racism (measured by the Perceived Racism Scale – McNeilly et al 1996) has been examined for its predictive effects upon paranoia among African Americans (Combs et al 2006). In a population of African American college students, Combs and colleagues found that perceived racism was highly significantly correlated with both cultural mistrust and with non-clinical paranoia, even following adjustment.

A prospective study from the Netherlands examined people with no history of psychosis at baseline and at three-year follow-up (Janssen et al 2003). It found that baseline perceived discrimination was associated in a dose-response fashion, with delusional ideation at follow-up, irrespective of ethnicity and after adjustment. Both this and the Combs et al study suggest that perceived racism/ discrimination are correlated with both sub-clinical paranoia and frank delusional ideation.

An American study examined racial differences among male outpatients with severe mental illness on therapeutic support, mental health service utilization, and service satisfaction (Tsai et al 2012). A total of 530 participants (289 White, 179 Black, and 62 of another race) across three large mental health centers (two state funded and one federally funded) in Connecticut were examined cross-sectionally. No racial differences were found in therapeutic support, and there were essentially no racial differences in service satisfaction, suggesting there are few racial differences in the reported quality of mental health care and service utilization among male outpatients with severe mental illness.

Race appears to play a significant role as a determinant of health in the UK and US. The study of racism and health is in relative infancy (Chakraborty & McKenzie 2002). The persistence of racial inequalities in health need to be understood in light of the persistence of racialised social structures that appear to affect health status in multiple ways. It may be suggested that the self-reported racism is a neglected determinant of health in research and this, in itself, may contribute to the racial disparities in health outcome.

6. Ethnic inequalities in UK mental health care

Inequitable variation in the use of British health care services between ethnic groups has been a matter of concern for British policy-makers and the Government alike. It has been reviewed that mental health services are unappealing to some ethnic groups, who complain of more coercive treatment as and adverse experiences (Cochrane and Sashidharan 1996) and these experiences have been recently more systematically reviewed (Bhui et al 2003). The UK Government's Department of Health has recognized that there is a problem of race inequality regarding the provision, management and outcome of mental health services and addressed the issue of race and mental health care in the National Health Service in two documents: "Inside Outside: Improving mental health services for black and minority ethnic

communities in England" (DoH 2003) and "Delivering race equality in mental health care" (DoH 2005).

6.1. Ethnic differences in experience, adherence and pathways to care

Bhui and colleagues recently conducted a thorough systematic review of UK studies published between 1983 and 2000, which compared access and use of mental health services by different ethnic groups (2003). They suggested that Black people are over-represented among in-patients and that Asian patients use in-patient facilities less often than White patients. Also, there is some evidence for variations in pathways to specialist mental health care, with Black people traversing more complex routes. Variation in primary care assessments or primary care involvement could explain some of those ethnic pathway-differences to specialist services but the primary care literature was found to be limited. The authors end by deeming a future priority as the measurement of discrimination as a potential explanatory factor for some of these differences.

More recently, the Aetiology and Ethnicity in Schizophrenia and Other Psychoses (ÆSOP) study sought to investigate the relationship between ethnicity and pathways to mental health services in two UK centres in a large cohort of patients with a first episode of psychosis (Morgan et al 2005a). African-Caribbean patients were significantly more likely to be compulsorily admitted than White British patients, as were Black African patients. In a companion study, the ÆSOP group investigated the pathways to mental health care and ethnicity in a sample of patients with a first episode of psychosis drawn from two UK centres (Morgan et al 2005b). They found that compared with White British patients, general practitioner referral was less frequent for both African-Caribbean and Black African patients and referral by a criminal justice agency was more common. With the exception of criminal justice referrals for Black African patients, these findings remained significant after adjusting for potential confounders. This suggested to the authors that factors operate during a first episode of psychosis to increase the risk that the pathway to care for Black patients will involve non-health professionals.

Linked to pathways to mental health care, the patient's experience of treatment within services is significant. There is limited research-work examining the effects of ethnicity upon adherence with psychotropic medication. One US study compared psychotropic adherence rates in monolingual-Hispanics (mostly Puerto Ricans), bilingual-Hispanics, and African-Americans as compared with Caucasians in 122 subjects recruited from a community mental health center (Diaz et al 2005). After controlling for possible confounding factors monolingual-Hispanics and African-Americans had lower medication adherence rates than Caucasians.

A second US study of Texan Medicaid claims retrieved for patients diagnosed with either schizophrenia or schizoaffective disorder assessed the association between ethnicity or medication and days' use of the medication in the year following initiation (Opolka et al 2003). It found that African-American and Mexican-American patients were significantly less adherent than White patients, even after controlling for potential confounding factors.

The net result for Black patients of more aversive pathways to care, greater compulsory admissions and poorer medication adherence, unsurprisingly, seems to lead both to increased mutual distrust from both patients and care-providers, as well as a more costly experience for Black patients through mental health services. The finding that Black people are often reluctant to engage with mainstream mental health services with delays in seeking help, seems to create new risks, such as police involvement or use of the Mental Health Act, which leads to disproportionately high rates of hospital inpatient admission, compulsory admission, admission to intensive care and secure services and use of seclusion and restraint in all types of hospital. Such patterns of service-use are negatively experienced and associated with poor outcomes, as measured by relapse and readmission. In turn, these adverse consequences reinforce mistrust of mainstream services that is the initial cause of delayed engagement.

The report "Breaking the Circles of Fear" (Sainsbury Centre for Mental Health 2002) looked into the relationship between African and Caribbean people and mental health services. It confirmed previous quantitative findings in relation to the over-representation of African and Caribbean people in services. It also highlighted: high concentrations of African and Caribbean people within inpatient, acute and secure treatment settings; limited involvement of primary care and a lack of community-based crisis care; people coming into contact with services via the criminal justice system; poor levels of engagement and satisfaction; questionable attributions of risk to Black service users; high levels of fear among Black service users of both mental health professionals and of statutory services; a related high level of fear among mental health professionals in relation to the risks posed by Black service users; and alienation and lack of involvement of Black carers.

6.2. Institutional racism and mental health

Institutional racism may be defined as "the collective failure of an organization to provide an appropriate and professional service to people because of their colour, culture, or ethnic origin. This can be seen or detected in processes, attitudes, and behaviour that amount to discrimination through unwitting prejudice, ignorance, thoughtlessness, and racist stereotyping which disadvantages people in ethnic minority groups" (MacPherson 1999). The concept has been applied to psychiatry and will be discussed later but prior to this and related to it, has been the debate of the provision and delivery of services to minority ethnic groups and to best suit their mental health needs.

The fairly consistent findings reported in the previous section have suggested certain themes of mental health care in relation to the Black British population: that of increased coercion, more aversive pathways to care, leading to greater mistrust, sooner disengagement from services with poorer service-related outcome and greater rates of readmission. These themes have prompted the charge of either a prejudicial or discriminatory mental health system when it comes to care provision for minority ethnic groups, and the need for a suitable solution if this is indeed the case.

The charge of whether or not UK psychiatric services are institutionally racist has also been recently hotly debated in the literature (Singh and Burns 2006; McKenzie and Bhui 2007). A

focus of the debate has been the Healthcare Commission's report of the findings of the "Count me in" one-day census of NHS hospitals, private mental health hospitals and learning disability units (Healthcare Commission 2006). The survey of 32,023 inpatients reported that 21% of patients were from black and minority ethnic groups, although they represent only 7% of the population. Rates of admission were lower than average in the white British, Indian, and Chinese groups, but three or more times higher than average in black African, black Caribbean, and white and black Caribbean mixed groups. Not only were people in these three groups more likely to be admitted to hospital, but also those in hospital were 19-39% more likely to be admitted involuntarily. Once in hospital, people who defined themselves as black Caribbean had the longest stay.

Singh and Burns state that these findings do not necessarily prove institutional racism, and that the scientific evidence to support this charge is inconclusive (2006). They argue that the increased rate of psychotic disorder in UK second-generation African-Caribbeans is not a specific phenomenon, rather a common experience of migrants in a new country. They argue that the more aversive care pathways of African-Caribbeans through the mental health system may be better explained by: greater stigma of mental illness within this minority community, and less social support from the immediate family, rather than by psychiatric racism. The racist argument is further undermined, they suggest, by the lower aversive pathways for the south Asian community (which, presumably would also be subject to racism from the system) where the familial support might be stronger. They write that the accusation of racism against the health system can be pernicious, as it sets up distrust in the minority community which may present to services with an expectation of inequitable services leading to their delayed help-seeking further and impeding recovery. It may also undermine staff morale, whom may feel undervalued and blamed as a result of charges of racism.

In response to this, academics have suggested that the above position represents a set of stereotyped responses to charges of racism rather than sound scientific arguments (McKenzie and Bhui 2007). Those inappropriate responses consist of either blaming the individual making the charge of racism; misunderstanding institutional racism as the fault of the individual rather than a systemic failure; requiring proof of intent within a racist action if it is to be truly racist; and finally, ignoring the urgency of the problem by calling for more research rather than suggesting remedial action.

6.3. Epidemiological issues around hospital admission data

The use of psychiatric hospital in-patient admissions statistics to examine ethnic variations in the pattern of mental illness offers both advantages and disadvantages. These statistics present both general challenges as well as those specific to interpreting trends within ethnic groups. On the one hand these data have been available on a national scale and are not likely to be influenced by the research process itself. On the other hand these data suffer from several problems, which means that findings based on them exclusively can be considered only as a starting point in the research process rather than necessarily as a basis for drawing conclusions.

Sashidharan raises problems with epidemiological research in examining the issue of increased diagnosis of schizophrenia in African-Caribbeans in his elegant review, which is still relevant today (1993). He begins by discussing the invoking of a commonality of culture to heterogeneous peoples as misleading: that the categorization of African-Caribbeans as a single cultural group is inappropriately simplistic. He goes on to state that the tradition of epidemiological approaches to cross-cultural comparisons of rates of schizophrenia is often problematic because of vastly different methods used across studies including differing case finding methods, lack of diagnostic criteria and the failure to control for confounding variables such as socio-demographic factors.

6.4. Alternative explanations

There may be other factors than perceived racism, which are predictive of therapeutic engagement in those with schizophrenia and psychosis. These include the following and will be further discussed in the Discussion section: remission of paranoia; impaired insight; involvement with the criminal justice system; recovery style; physical abuse as a child; lack of knowledge regarding consumer rights; difficulties in building an alliance; low neuroticism and high agreeableness (Lecomte et al 2008). It is possible that these factors act alongside that of perceived racism or are in fact either confounders or proxy measures of the relationship between racism and outcome.

7. UK African-Caribbeans with psychosis: A case study

Migration from the Caribbean to the United Kingdom began in the early 1950s. Psychiatric research in Britain over the past three decades has consistently shown elevated rates of schizophrenia among African Caribbean people compared with the indigenous white British population, with Caribbeans typically reported to be three to five times more likely than whites to be admitted to hospital with a first diagnosis of schizophrenia (Chakraborty 2008). These findings have been repeated in studies that have looked at first contact with all forms of treatment, rather than just hospital services (King et al 1994; van Os et al 1996); and the rates of schizophrenia were found to be even higher in the UK-born children of the immigrants (Harrison et al 1988).

Some commentators have not accepted the validity of these data and continue to suggest that a higher incidence remains unproven owing to methodological flaws with the research (Sashidharan 1993). Epidemiological issues are as follows: until the 1991 Census, where a question on ethnic background was asked for the first time, the data on the size of the African Caribbean population in the UK was limited and unreliable, resulting in its possible underestimation and consequent overestimation of morbidity rates. However some have shown that even if the Caribbean population was much larger than initially estimated, the psychosis rate still remains significantly greater than in the white population (van Os et al 1996; Bhugra et al 1997). The incidence rates reported for Caribbeans in their countries of origin however, seem much lower and closer to the rates seen in the white British popula-

tion in the UK (Mahy et al 1999), although this may only be inferred from certain work where ethnicity was not reported. Therefore, people have sought to explain why there is an elevated rate of psychosis in African Caribbeans in the UK compared with the indigenous population and compared with their counterparts in the Caribbean.

The anthropological argument against applying the Western concept of schizophrenia to people from other cultures has been raised (Fernando 1988). Fernando argues that explanations for differences in rates of schizophrenia are invariably concerned with biological differences between racial groups, whilst failing to consider the socio-political (often racist) context in which the diagnoses are made. He continues that schizophrenia is “over-diagnosed” and this hinges on the nature of a psychiatric diagnosis and the nature of racial bias. Fernando views diagnosis as a hypothesis: no more, no less, but in a psychiatric culture where he perceives racial bias to be active, a correct diagnosis in the psychiatric tradition could still be viewed as a racist one, and therefore inappropriate.

Many non-Western cultures do not regard hallucinations as pathological as they are in the West. This could mean an increased readiness to volunteer hallucinatory experiences by non-Western groups. Indeed, increased hallucinatory behaviour and paranoid experiences have been described by Blacks compared with Whites in both the UK and the US general populations (Sharpley & Peters 1999).

There is a belief that African-Caribbeans diagnosed with schizophrenia experience a more relapsing and remitting illness, with more affective symptoms and social disturbance, but fewer negative symptoms than their white counterparts. McGovern and Cope found greater incidence of atypical psychoses and acute-onset illnesses in UK Caribbean patients, usually associated with a good outcome (1991). McKenzie and colleagues conducted a four-year follow-up study of patients with recent-onset psychosis and found the Caribbean patients spent more time in a recovered state, were less likely to have a continuous illness, although they suffered more compulsory admissions and imprisonments; this may suggest at least an illness with a different outcome if not a different illness entity (1995).

The increased risk of schizophrenia has also been attributed to an underlying genetic susceptibility, obstetric injury, maternal congenital rubella, migration, and cannabis misuse but these theories remain either largely unsubstantiated by the epidemiological evidence or the findings themselves are contradictory.

7.1. Social hypotheses

7.1.1. Urbanicity

There is a clear association between inner-city deprivation and high rates of psychiatric admission in general and schizophrenia in particular. It has been suggested that being born or brought up in the city increases the risk of schizophrenia rather than simply a consequence of social drift or social residue. This increased risk has been linked to stressful life events, isolation, overcrowding, higher crime, and lower socio-economic status. The association may be confounded by the observation that physical risk factors occur more commonly in the city, such as low birth-

weight and perinatal infections (Chakraborty 2008). Harrison and colleagues did not find that area of residence alone was capable of explaining the elevated risk of schizophrenia in Caribbeans in UK cities (1988). It could be that African-Caribbean people are exposed to adverse social factors more frequently than their white counterparts, such as stressful life events, lower socio-economic class and unemployment levels (Bhugra et al 1997).

7.1.2. Social disadvantage

Social support systems influence health. The physical structure of communities and social cohesion could either encourage or discourage mutual support, self-esteem, a sense of belonging and enriched social relationships. The level of mutual dependency and positive support that can arise from a community, which has high reciprocity and structured caring, (known as "social capital" [Putnam 1995]) may protect against mental illness.

Researchers have argued that Caribbean community structure is compromised relative to other groups, in terms of more single-parent families, more parental separation and more children raised in foster care or children's homes (Maughan 1989). More people live alone and are imprisoned, leading to a form of social exclusion which may increase a susceptibility to poor health. Indeed, it has been found that the incidence of schizophrenia in non-white ethnic minorities in London is greater when they comprise a smaller proportion of the local population, supporting the "ethnic density" effect (essentially, safety in numbers) as a buffer against psychosis (Boydell et al 2001).

7.2. Pathways to care and within the system

As described earlier, it has been found that African-Caribbean patients with schizophrenia in the UK have more aversive pathways into care, i.e. greater police involvement, less general practitioner involvement and a greater occurrence of compulsory hospital admissions (Davies et al 1996). This appears to be unrelated to the duration of untreated psychosis, occurring in early-onset and more chronic cases alike. It has been thought that African-Caribbean patients may not seek general practitioner help early on in their illness due to embarrassment and shame about stigma, leading to a deterioration in health and the need for more dramatic intervention later on (Owens et al 1991). Young black men are more often perceived as dangerous and threatening, and this too may contribute to increased rates of compulsory admission.

Once within care, black Caribbean patients are more likely to remain in hospital for longer with more frequent admissions (McKenzie et al 1995); are more often treated in secure facilities; are given higher doses of psychotropic medication and larger amounts of depot injections; and receive less psychotherapy than white patients. People of Caribbean origin leave hospital with more untreated symptoms and are less likely to stay engaged with services (Chakraborty 2008).

7.3. The effect of racism

Racism is a plausible explanation for the increased rates of psychosis in UK Caribbeans. Racism compounds the effects of gender and social deprivation (Lillie-Blanton & LaVeist 1996).

In addition, thwarted aspirations have been linked to psychological stress and the persistent, prolonged struggle and failure to overcome difficulties of denied opportunities has been linked to a decrease in psychological well-being and hypertension (James 1994).

Discrimination has been prospectively linked to delusional ideation (Janssen et al 2003) but prospective work examining the association between racism and psychosis is still sparse. It is conceivable that there is an association between racism and lack of adherence as Caribbean psychotic patients are more likely to attribute their problems to racism than mental ill health (Chakraborty et al 2001).

A lack of adherence with treatment is typically associated with a mismatch of explanatory models between doctor and patient (Callan & Littlewood 1998); if the patient is more likely to frame their problems within a framework of racism rather than mental illness, they are less likely to comply with a treatment plan that fails to acknowledge their framework. The perception that services and treatment are discriminatory deters African-Caribbeans from accessing these services.

One could argue that the perception of the African-Caribbean patient's illness experience of the phenomenon known as schizophrenia represents an explanatory map that overlaps with that of a schizophrenic patient from a different culture with both common and distinct elements, with differing emphasis placed on those elements by the illness-sufferer. If greater regard is placed upon the racial elements by the patient and correspondingly less attention is paid to them by the clinician, it becomes understandable why therapeutic alliances fail to form, treatment programmes break down and prognosis and service-related outcomes suffer.

As a result, service-related outcomes, such as poor satisfaction, poor subsequent engagement, compulsory hospitalization and depot medication use, reflect an impaired interaction between the individual and the system of care, which may at least in part be due to the individual perceiving services as racist. A recent US study found that African American men with mild paranoia were less likely to be hospitalized than their white counterparts, suggesting a state of "cultural mistrust" of services by the former group, leading to them delaying help-seeking (Whaley 2004).

In 100 African-Caribbean participants with psychosis, racism was measured at baseline using the Perceived Racism Scale; with adherence, using the Drug Attitudes Inventory and Kemp Scale, and hospital admission-data determined after 12 months (Chakraborty et al 2011; 2009c). We found associations between total perceived racism for the previous year, and everyday-racism for the previous year, with subsequent medication adherence. Shame felt about health-system racism was associated with increased adherence, and powerlessness about it was associated with fewer subsequent hospital bed-days. Finally, health-system racism was associated with both the number of subsequent hospital bed-days, and admission-length. In addition, stratified analyses showed that both baseline adherence and six-month estimated adherence appeared to mediate these effects. In this cohort of African-Caribbean patients with psychosis, perceived racism was a determinant of adherence over 12 months.

Therefore, we proposed a model whereby perceived racism contributes to an individual rejecting mental health services (manifested by the mediating effect of poor adherence) which leads to a poorer outcome, evidenced by a longer hospital stay. Secondly, powerlessness about perceived health-service racism may represent a sense of resignation about the “system”, leading paradoxically to greater adherence and better outcome.

8. The first nation experience: A Canadian perspective

The primary and secondary authors have recently migrated to Canada. This affords the opportunity to compare the phenomenon described in the case study cross-culturally namely, in North American indigenous peoples: the First Nation population. The First Nations are the various Aboriginal peoples in Canada having cultures spanning thousands of years, who are neither Inuit nor Métis. The total population is nearly 700,000 people. There are currently over 630 recognized First Nations governments or bands spread across Canada, half of which are in the provinces of Ontario and British Columbia.

Aboriginal people experience a broad range of health issues, and have the poorest health levels in the country. Aboriginal people have shorter life expectancies, experience more violent and accidental deaths, have higher infant mortality rates and suffer from more chronic health conditions (Ontario Aboriginal Health Advocacy Initiative, 2003). Aboriginal people are also more likely to face inadequate nutrition, substandard housing and sanitation conditions, unemployment and poverty, and discrimination and racism; all important factors in maintaining health and wellness.

The First Nation population is distinct from the African-Caribbean comparator, in that the former has not migrated; therefore the potential confound of migration-stress is avoided, as is the potential effect of dislocation from a broader social network which, on some levels, has remained intact.

8.1. Mental health disparities

Socio-economic inequity is associated with higher rates of suicide and mental illness, by exposing individuals to a wide range of stressors, including negative life events, as well as diminishing their hopes and expectations for a positive future with meaningful opportunities for work and life. Rates of mental health problems, such as suicide, depression, and substance abuse, are significantly higher in many Aboriginal communities than in the general population (First Nations Regional Longitudinal Health Survey, 2005).

Thirty percent of First Nations people have felt sad, blue or depressed for two or more weeks. Suicide and self-inflicted injuries are the leading causes of death for First Nations youth and adults up to 44 years of age. (Health Canada, 2003; Kirmayer et al 2007). First Nations youth commit suicide about five to six times more often than non-Aboriginal youth. The suicide rate for First Nations males is 126 per 100,000 compared to 24 per 100,000 for non-Aboriginal males. For First Nations females, the suicide rate is 35 per 100,000 compared

to only 5 per 100,000 for non-Aboriginal females (Canadian Institute of Child Health, 2000). Suicide rates for Inuit youth are among the highest in the world, at 11 times the national average. Over a third of all deaths among Aboriginal youth are attributable to suicide. Although the gender difference is smaller than among the non-Aboriginal population, males are more likely to die by suicide, while females make suicidal attempts more often. Suicide is never the result of a single factor, but arises from a complex web of interacting personal and social circumstances. The individual variables that affect suicide in Aboriginal people are no different than those found in other populations and communities, but the prevalence and interrelationships among these factors differ for Aboriginal communities due to their history of colonization, and subsequent interactions with the various institutions of Canadian society.

Alcohol intoxication has been reported to be a major factor contributing to suicide in most studies of First Nation people. The strong association of alcohol intoxication and suicide among First Nations people reflects the high prevalence of substance abuse in many communities with an earlier age of first use (May et al., 2002). A survey of drug use in Manitoba assessed Aboriginal (Indian and Métis residents off-reserve) and non-Aboriginal adolescents over four consecutive years from 1990 to 1993 (Gfellner and Hundleby, 1995). The Aboriginal groups had consistently higher rates of use of marijuana, non-medical tranquilizers, non-medical barbiturates, LSD, PCP, other hallucinogens, and crack cocaine. For both LSD and marijuana, the average rate of usage for Aboriginal adolescents was over three times higher than the corresponding non-Aboriginal rate. This is important to note, as both alcohol and substance misuse are known to interact with mental illness not only as a causal factor, but as a consequence.

However, there are wide variations across Aboriginal communities, with many showing rates lower than the general population. Disaggregating generic figures may shed light on resiliency factors operating in certain Aboriginal communities that guard mental health.

8.2. The legacy of residential schools

An important historical determinant believed to have shaped the mental health of Aboriginal people is the legacy of the residential schools. The Indian Residential School (IRS) system grew out of Canada's missionary experience with various religious organizations, with federal governmental administrative involvement as early as 1874. The schools were located in every province and territory, except Newfoundland, New Brunswick and Prince Edward Island. The children were transported from their homes and families and culture of origin to often distant schools where they were mixed with children from different first Nations traditions. A distinctly Western-cultured learning methodology and belief system was delivered, which determined knowledge acquisition and, indirectly, may have had an impact upon self-esteem. Most residential schools ceased to operate by the mid-1970s; and the last closed in 1996. It is estimated there are 80,000 people alive today who attended residential schools. Although it is not uncommon to hear former students speak about positive experiences in residential school, their stories are often overshadowed by disclosures of abuse, criminal convictions of perpetrators, and the legacy of the IRS system. A research project commis-

sioned by the Aboriginal Healing Foundation found that 75 percent of the case files for a sample of Aboriginal residential school survivors contained mental health information with the most common mental health diagnoses being post-traumatic stress disorder, substance abuse disorder and major depression. (Aboriginal Healing Foundation, 2003).

8.3. Housing

An additional social determinant of mental health may be the problem of housing. In Canada, racial ghettos arose with the formation of First Nations reserves which led to the segregation of people, depriving them of the systemic social supports available. A recent federal evaluation of First Nations housing concluded that the housing shortage on reserves is severe with no immediate sign of improvement (Aboriginal Affairs and Northern Development Canada, 2011). According to the February 2011 report, 35,000 new units would need to be built to meet current demand although the Assembly of First Nations puts the figure closer to 85,000. Housing on reserves appears substandard when compared with housing off reserve: 41.5 per cent of homes on reserves need major repairs, compared with seven per cent in non-aboriginal households outside reserves. Rates of overcrowding are six times greater on reserve than off. In many communities, three generations live under one roof through necessity rather than choice.

The First Nation reserves are very often quite isolated geographically and socially. There often is no employment for young people on the reserve or in the immediate area. The federal allowance or provincial social services is a major source of funding for daily life. At the same time traditional valued social roles such as hunting have been lost. Diversions such as substance abuse have occurred. The absence of social roles and remunerative work on reserves has resulted in some exodus of community members searching for work or meaningful identity, to often inner-city areas where substance use and crime has further undermined their mental health. These features would describe the communities with a high incidence of morbidity. However because of the diversity of the First Nations, some communities are intact, value and preserve their traditions, and have extended families including the elders who pass on the community values, skills, language, belief systems, and identity. These attributes contribute to the community resilience and can support individual health.

Nevertheless, research has shown that inadequate housing and support can lead to deteriorations in mental health, increase risk of suicide, put strain upon family relationships, homelessness and involvement with the criminal justice system, and lead to inappropriate hospitalisation or unnecessarily long stays in hospital (Freeman 2004; Newman 2001; Wong & Solomon 2002).

8.4. First Nations Regional Longitudinal Health Survey

The First Nations Regional Longitudinal Health Survey (RHS) is the only First Nations governed national health survey in Canada (First Nations Information Governance Centre, 2012). In the past, large numbers of First Nations people living on reserve were excluded from major national health surveys such as the National Population Health Survey (NHPS).

Other surveys, which attempted to obtain on-reserve data, did not reach enough communities, and thus, were unable to produce valid statistics at the national or regional level upon the relationships between social determinants and disease prevalence. These pieces of information are crucial to drive effective and responsive policy development to improve the health of First Nations.

The first RHS was in 1997 involving First Nations and Inuit; it was launched to redress the exclusion of First Nations and Inuit from major national health surveys. RHS 1997 is considered to be the pilot survey for the longitudinal RHS. RHS Phase 1 [2002/2003] was designed as a baseline study within a longitudinal survey. Over 22,000 surveys were collected from 238 First Nations communities across Canada. RHS Phase 2 [2008/2010] has been completed, with Phase 3 [2012], finally Phase 4 [2016].

Phase 1 reported upon racism, as well as barriers to health and barriers to accessing health care. Of note, one in ten First Nations adults reported having suicidal thoughts and 50% of those people reported suicide attempts over their lifetime. First Nations youth were found to not access traditional supports or mental health services, despite reporting not feeling emotionally or mentally balanced and not progressing in relation to reducing alcohol and drug abuse. Phase 2 has preliminarily reported upon mental health and substance misuse as well as other areas however, as in Phase 1, there is no quantitative inter-ethnic comparison of mental illness prevalence or service-use.

8.5. The Alberta First Nations Report: A focus on health service use

The closest example of an inter-ethnic comparison and, perhaps a template to compare with our putative model of racism and psychosis in UK Caribbeans, is taken from a 2004 report focussing on health service use in First Nations residents in Alberta (Cardinal et al, 2004). The study reported upon adopted a uniquely bicultural approach, employing both quantitative and qualitative methods to arrive at a holistic understanding of disease and wellness more closely akin to the traditional First Nations' paradigm of illness.

The Alberta Mental Health Board provided information showing that First Nations people had three times more episodes in psychiatric treatment centres than the matched control group (Caucasian Canadians), with the majority of episodes lasting less than one week. However, the control group had more outpatient mental health clinic episodes than did First Nations people. Finally, they found that First Nations people were 2.9 times more likely to be treated in the physician's office for schizophrenia than the control group.

The First Nations findings have striking similarities with the UK Caribbean psychosis trends described earlier: more acute psychiatric inpatient admissions; shorter lengths of stay; lower use of non-emergency, outpatient services; and the greater likelihood of the First Nation patient in the physician's office being treated for psychosis, than their Caucasian counterpart. Overall one could infer that these indicate cultural mistrust in mainstream mental health services with the consequent adverse impact on service-related outcomes. Perhaps a cycle of mistrust is set into motion as before, with the avoidance of outpatient services earlier in an illness; undermining prevention and leading to further deterioration; prompting the com-

pulsion toward emergency treatment through imposed hospital admission; ending in sooner disengagement from this process, exemplified by a shorter admission; in a climate of further distrust. The Albertan authors seem to have recognized the potential for services' mistrust by acknowledging the importance of racism and discrimination upon adverse health outcomes, concluding that culturally-sensitive mental health treatment is required in order to redress these disparities.

9. Conclusion

Research on the impact of racism on adherence and health should pay further attention to the ways in which victims respond to and attempt to manage these negative experiences. More generally, future research should try and identify the health-enhancing resources and cultural strengths that provide protection from at least some of the pathogenic risk factors that may be faced by this group.

Feelings of shame and powerlessness induced by racism from mental health services were found to improve both adherence and reduce hospital admissions; this is a double-edged sword. Those individuals concerned showed improved adherence and outcome, but at what personal detriment to their psyches and feelings of self-worth? It would be interesting to determine the association between such feelings of powerlessness and shame related to health services and the longer-term psychological and social functioning of individuals.

If the experiences of racism are viewed as a significant stressor they, like other stressful life events, could be inquired into and recorded within the psychiatric history-taking process. Indeed, increasing patient-centeredness in African-Americans has been raised as an important strategy to address racial/ethnic disparities in health care (Johnson 2004); which builds on previous research where patient activation has been linked to improved health outcome (Stewart 1995). With common themes emerging in this regard in both UK African-Caribbeans and the Canadian First Nations people, this model could be extended for use in both populations and perhaps, beyond.

Through sensitive and genuine acknowledgement, this could be a way of relieving the sense of disempowerment and shame the patient might have felt about their experiences. Perhaps such a clinical encounter could strengthen the therapeutic relationship through a sense of mutual trust, and hopefully improve the outcome of people in the UK and Canada suffering from the effects of both racism and psychosis.

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