Reviving the ‘double jeopardy’ hypothesis: physical health inequalities, ethnicity and severe mental illness

Jayati Das-Munshi, Robert Stewart, Craig Morgan, James Nazroo, Graham Thornicroft and Martin Prince

Summary
People with severe mental illness (SMI) experience a reduction in life expectancy of 15–20 years. Physical health and mortality experience may be even worse for ethnic minority groups with SMI, but evidence is limited. We suggest clinical, policy and research recommendations to address this inequality.

It is a stark finding that people with severe mental illness (SMI) such as schizophrenia have a life expectancy which may be up to 20 years less than the general population. More than two-thirds of deaths are from preventable causes such as cardiovascular and respiratory disorders. Although there have been shifts in policy to address this, the impact on physical health of living with an SMI is rarely considered within the context of the wider health inequalities agenda.

The ‘double jeopardy’ hypothesis was suggested in the 1970s to describe the intersection of age and ethnicity in leading to poorer health. Investigators noted that Black Americans experienced poorer health relative to White Americans as they aged and this was attributed to the effects of a lifetime of racial discrimination and stigma, which may have adverse consequences for health.

It is acknowledged that ethnic minority communities represent people of diverse backgrounds, with varying experiences of health which do not remain static over time. However, across settings, commentators have noted disparities in the cardiovascular health of some ethnic minority groups relative to referent populations.

There have been few studies which have empirically assessed double jeopardy by ethnicity and SMI for physical health and life expectancy. The authors of a recent review of US studies concluded that African–Americans with SMI had an increased prevalence of obesity and weight gain, relative to White Americans with SMI, and that the risk of diabetes mellitus was also elevated in African–American and Hispanic people living with SMI. The reasons for this are beyond the scope of this editorial, but a parallel body of work indicates that rates of psychotic disorders are also elevated in some ethnic minority groups relative to referent populations. Therefore, it may be negligent not to discuss the way in which ethnic minority status may intersect with SMI, potentially leading to even poorer health outcomes. We believe that an overview is timely and may help to inform future directions for research and practice.

Evidence for double jeopardy

There have been few studies which have empirically assessed double jeopardy by ethnicity and SMI for physical health and life expectancy. The authors of a recent review of US studies concluded that African–Americans with SMI had an increased prevalence of obesity and weight gain, relative to White Americans with SMI, and that the risk of diabetes mellitus was also elevated in African–American and Hispanic people living with SMI. In the UK, studies from primary care have indicated that relative to White British people with SMI, obesity is more prevalent in South Asian people with SMI, and diabetes and cardiovascular disease may be more prevalent in Black people with SMI. In addition, age-standardised mortality ratios may be elevated in Black African people with SMI, relative to White British people with SMI. Thus, in the limited research to date, adverse health outcomes which are already known to be a concern in SMI populations, may be even worse in ethnic minority groups living with SMI. The evidence is more consistent for type 2 diabetes mellitus, but less clear for other cardiovascular health outcomes.

What causes double jeopardy?
Social and economic disadvantage and lifestyle
Lifestyle, diet and antipsychotic medications have been implicated in cardiovascular morbidity in people living with SMI. Adverse ‘social gradients’ for health, whereby people of lower social standing have poorer health, potentially mediated through chronic stress, may also play a role for people with SMI. The association of social position or the gradient with health outcomes...
is not purely accounted for through traditional risk factors such as smoking, and these health-related behaviours in themselves may also follow strong social gradients. The association of this with ethnicity and SMI needs further clarification and has been restricted by data limitations. For example, prediction models for 10-year risk of cardiovascular disease in people with SMI could not include ethnicity, due to this being inconsistently recorded in health records.

Social and economic inequalities have also been implicated as a fundamental cause of cardiovascular health inequalities in some ethnic minority groups, although there is much heterogeneity. It is possible that there may be genetic interactions with environmental factors; however, to date there is no evidence to suggest that these are mediated solely by ethnic differences in genotype. It is likely that there are complex associations between socioeconomic position and physical health and mortality for ethnic minorities living with SMI, which will vary according to context. The role of social and economic disadvantage will need to be central to any analyses.

**Stigma and discrimination**

People with SMI such as schizophrenia anticipate and experience stigma and discrimination in their everyday lives. Discrimination also plays a role in the aetiology of psychosis in ‘visible’ ethnic minorities and affects the type and quality of care received. For example, within mental health services, Black patients are more likely to experience complex pathways into care, with a greater likelihood of police involvement and compulsory detention, relative to White patients.

It is possible that the role of discrimination functions in multiple ways when related to the concept of double jeopardy. First, ‘doubly’ discriminated people may experience greater levels of chronic discrimination which are cumulatively more stressful and directly pathogenic for health. Second, such individuals may be more likely to experience structural discrimination which extends to the quality of physical healthcare received, especially if healthcare services are perceived as discriminatory or are inadequately culturally sensitive. Third, high levels of perceived discrimination may increase the risk of participation in ‘unhealthy’ behaviours and reduce ‘healthier’ behaviours.

**Implications and recommendations**

There appears to be some evidence indicating a double jeopardy for physical health for ethnic minorities living with SMI, supported through a handful of studies which have suggested that the prevalence of cardiovascular morbidity or mortality risk may be greater in people from an ethnic minority background with SMI, compared with referent populations. The evidence is sparse and mostly informed by non-epidemiological samples from psychiatric clinics, relating to populations from the USA.

With this in mind, we propose the following clinical, research and policy recommendations.

1. Research based on representative samples, rather than convenience-based clinical samples is needed. There is very little data highlighting the prevalence of cardiovascular risk factors such as type 2 diabetes mellitus, ischaemic heart disease, obesity and tobacco use in ethnic minority people living with SMI. The use of routine electronic patient records may help to deal with gaps in the literature which could then be used to inform service provision, especially in ethnically diverse areas.

2. For clinicians the possibility that physical health inequalities may be even worse in ethnic minority groups living with SMI is a concern. This may mean more proactive screening and management in ethnic minority groups with SMI, especially in groups already known to be at a higher risk of cardiovascular disease, which would render screening more cost-effective.

3. It is unclear whether the experience of living with an SMI leads to additional disadvantage for ethnic minority people, for example in terms of equitable access to evidence-based treatments, or through an impact on help-seeking. Future research could investigate this. Qualitative methods may help to unpack the intersectionality of ethnicity and living with SMI (which may go beyond additive/multiplicative models of epidemiological ‘risk’). Such approaches could help to highlight barriers to accessing equitable care from the perspectives of patients and the role of perceived discrimination on health-related behaviours. In particular these approaches may highlight overt as well covert/structural forms of discrimination and the way in which this may impact on health-seeking behaviours and self-management.

4. Shifts in policy which target the management of physical health comorbidities in people with SMI may potentially narrow treatment inequalities, although evidence for this remains limited, especially with respect to ethnic minority groups. Research is needed to assess whether such approaches are of benefit.

5. As there is evidence to support other forms of disadvantage in SMI populations, future research will need to consider the role of holding multiply disadvantaged identities, not just restricted to ethnicity and SMI, and the ways in which these may interact to lead to poorer health outcomes.

6. Research based on electronic health records can only be as good as the data entered. Understanding these differences in health will require clinicians to ensure information on the health status of patients is adequately assessed and recorded. Policy makers should consider local incentives to improve the recording of key indicators such as self-ascribed ethnicity and measures for physical health, in ethnically diverse areas. This will help to inform service provision.

**Conclusions**

There is some evidence to indicate that a double jeopardy for cardiovascular health and mortality may exist for ethnic minority groups living with SMI. In general, the evidence remains scant and more work is needed to identify the scale of the problem as well as causal mechanisms. In the long term, interventions to directly address means of reducing health inequalities in multiply disadvantaged populations will be needed.

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Jayati Das-Munshi, PhD, Robert Stewart, MD, Craig Morgan, PhD, King’s College London, Institute of Psychiatry, Psychology and Neuroscience, London, UK; James Nazroo, PhD, School of Social Sciences, The University of Manchester, Manchester, UK; Graham Thornicroft, PhD, Martin Prince, MD, King’s College London, Institute of Psychiatry, Psychology and Neuroscience, London, UK

Correspondence: Jayati Das-Munshi, Department of Health Services and Population Research, De Crespigny Park, London SE5 8AF, UK. Email: jayati.das-munshi@kcl.ac.uk

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