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PERSONALITY DISORDERS IN BLACK PEOPLE: LESS PREVALENT OR THE RESULT OF HEALTHCARE INEQUALITIES?

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SUMMARY

The prevalence of personality disorders (PDs) in black people has consistently been reported as significantly lower than in their white equivalents. If this result is accurate, then it may reveal important clues as to the aetiology of personality disorders, which could provide invaluable insights as to how we should support these patients. However, if this result does not reflect the truth, then important questions must be answered as to why black people with personality disorders are under- represented. There has been limited investigations into what may cause a discrepancy in the PD prevalence between ethnicities. This review aims to determine whether the lower prevalence of PDs in black people is likely to be accurate, and if it isn't, explore some of the potential causes for the difference. This is an important issue to address as may reveal pertinent inequalities in healthcare.

Key words: *personality disorder – ethnicity –black people*

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INTRODUCTION

A personality disorder (PD) is a way of thinking, feeling and behaving that deviates from the expectations of the culture, causes distress or problems functioning, and lasts over time (DSM-5 definition, American Psychiatric Association 2013). The DSM-5 currently identifies ten PDs, which share core features of rigid, distorted thoughts, problematic emotional responses, impulsivity and significant interpersonal problems (DSM-5, APA 2013).

In the UK, the prevalence of PDs has been estimated to be 4.4% (Coid et al. 2006), with a greater prevalence reported in white people (4.5%) compared to other ethnicities (2.6%), including those of black ethnicity. This has also been reported elsewhere (Hossain et al. 2018), but the reason for this discrepancy is unclear: are PDs less prevalent in black populations or is there an under-representation of black people with PDs? If it is the case that PDs are truly less prevalent in black people, then this could provide important insights into the aetiology of PDs. But, if it is rather that black people are underrepresented in services, then it highlights a need to understand why this is and to promote awareness of the mental health services that are available to people. This is especially true for people with PDs, as they are at increased risk of mortality and suicide (Tyrer et al. 2015).

The prevalence of personality disorders in black people

The prevalence of PDs between ethnic groups has been investigated in different settings (communities, prisons, inpatient and outpatient settings) and locations (USA and UK). Whilst this makes synthesis of the data more difficult, a meta-analysis (McGilloway et al. 2010) of 7 studies was possible that found that PDs were significantly less prevalent in black populations compared to white (OR 0.476). This result was based on studies from hospital (Compton et al. 2000, Coid et al. 1999, Coid et al. 2000, Castaneda & Franco 1985, Maden et al. 1999), prison (Trestman et al. 2007) and community populations (Huang et al. 2006). It is important to note that in the only study conducted in the community, results from 43093 participants showed a significantly greater prevalence of PDs in black people (16.6%) compared to white (14.6%) ($p<0.05$) (Huang et al. 2006). The prevalence of PDs increases at each level of care, that is that PDs are more prevalent in psychiatric hospitals than in the general population. However, whilst this pattern is observed overall, it is unclear whether it occurs across all ethnicities, especially considering the recognised barriers that can exist between black communities and mental health services (Memon et al. 2016). The settings within which studies were completed could therefore significantly affect the results. In support of this, data from subgroup analysis (McGilloway et al. 2010) showed that black people were less likely than white people to have a PD in a hospital (OR 0.357), but most likely to have a PD in the community (OR 1.164). A recent study (Hossain et al. 2018) has found a similarly low prevalence of PDs in black patients admitted into East London hospitals compared to white British patients (OR 0.19 for Black African, 0.22 for Black Caribbean and 0.38 for Other Black). These results must be investigated further.

Personality disorders are less prevalent in black people: *true or an artefact?*

The finding that PDs are less prevalent in black people is controversial, and whether this is accurate is unclear. There are many explanations that could account for

under-representation of black people with PDs, with an important consideration being the avoidance of services. Many people, but particularly those in black communities, have dangerous preconceptions about mental health services (Keating et al. 2002). These become part of a 'circle of fear', in which black people are mistrusting and fearful of services, and service staff are weary of the black community in return. This leads to black people avoiding accessing services where possible, and as a result becoming underrepresented within them. It is important to acknowledge however that black people are not underrepresented in all of psychiatry. Notably, black people are more likely to be sectioned under the Mental Health Act (Davies et al. 1996, Lloyd & Moodley 1992) over-diagnosed with schizophrenia and subject to the use of depot-type psychotropic medication (Lloyd & Moodley 1992). These contribute to the distrust towards services, reinforcing fear and increasing disengagement. Measuring the prevalence of PDs in black people in a hospital or other care setting is therefore unlikely to be representative of a true result. A more accurate estimate would likely be based on studies conducted in the community, including the Huang et al. US study (Huang et al. 2006) that found an increased prevalence of PDs in black people compared to white (16.6% vs. 14.6%). Similar results were reported in a community-based British study (Crawford et al. 2012), that found the risk of PD was again higher in black people (OR 1.44). If the results of these studies are accurate, then important changes must be made to improve engagement of black people with mental health services.

More than just disengagement: *cross-cultural bias*

Disengagement from services is likely to be a significant factor in the apparent reduced prevalence of PDs in black people, but there are also likely to be additional factors involved. In the McGilloway meta-analysis (McGilloway et al. 2010), subgroup analysis revealed that when studies used both case notes and interviews to identify people with PDs, black people were more likely to have a PD (OR 1.140), but when only case notes were used, black people were less likely (0.281). Methodological differences between studies may account for these findings, but this could also suggest that the routine care of black people is likely to overlook PD diagnoses. Interestingly, there is also evidence that when forensic psychiatrists are presented with identical cases except for the ethnicity of the patient, they are more likely to diagnose PDs in white people compared to black (OR 2.7) (Mikton & Grounds 2007). This cross-cultural bias is likely the result of many factors, but notably that the intrinsic diagnosis of a PD assumes an understanding of the patient's culture (the DSM-5 definition describes a deviation from the expectations within a culture). In the previous study (Mikton & Grounds 2007), psychiatrists were given identical cases except for the ethnicity: Caucasian or African Caribbean. Of the 220 psychiatrists that precipitated in the study, none were African Caribbean, which limits their ability to identify what is a deviation within this culture. This bias is likely to be representative of real clinical practice, where it has previously been found that just 4% of doctors in the UK are black, compared to 63% white (Bowler 2004).

Ethnic variations: *why we may not always spot a personality disorder*

It must also be considered that black people may truly be less likely to have PDs, or rather PDs that are "easier" to recognise in clinical practice. There have been few studies into the ethnic variation of PDs, however it may cause significant differences in which PDs are more likely between ethnicities. Previously, black people have been found as significantly more likely to have schizotypal personality disorder (STPD) (Chavira et al. 2003) compared to both Caucasians and Hispanics ($p<0.05$). A more recent study has similarly found a significantly increased risk of STPD in black women (Pulay et al. 2009). STPD is an understudied PD and is often not recognised, which leads to no diagnosis or misdiagnosis (Rosell et al. 2014). Additionally, core features of STPD include social isolation and social anxiety (DSM-5), which may hinder the ability of people with STPD to access mental health services. If STPD represents a large proportion of PDs in the black population, it could explain in part why we see a smaller prevalence of PDs than we expect.

Misdiagnosis: *when we think personality disorders are something different*

Ethnic variation may have additional effects on the prevalence of PDs between ethnicities. Features of STPD, which may be more common in black people (Chavira et al. 2003, Pulay et al. 2009), include odd or unusual thought processes (including magical thinking), circumstantial or metaphorical speech, unusual beliefs and experiences and feelings of persecution (DSM-5). These features are very similar to those reported in schizophrenia, which could lead to misdiagnosis. This could explain both the lower prevalence of PDs seen in black people and may account somewhat for the significantly higher prevalence of schizophrenia in this population. Additional factors that contribute to the increased prevalence of schizophrenia in black people have previously been explored (Ngaage & Agius 2016), including the use of social withdrawal as a primary diagnostic symptom for schizophrenia when it is a key stress suffered by immigrants. Social withdrawal is also a common feature of many PDs, which likewise will increase the risk of misdiagnosis.

CONCLUSION

The prevalence of PDs in black people is controversial. Studies have reported conflicting data that seems to be associated with the setting within which the study was completed, where inpatient settings were more likely

to report a reduced prevalence of PDs in black people. There are many factors that could potentially contribute to this result, but notably one should consider disengagement from services, cross-cultural bias within the healthcare system and ethnic variations of PDs, which could lead to misdiagnosis. The effect of each of these must be quantified to determine whether PDs are truly less prevalent in the black population, or if black people are under-represented. This distinction is key as it could provide insight into the aetiology of PDs or highlight an inequality within mental health services.

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Contribution of individual authors:

Lucille Mclean devised the literature search and drafted the paper.

Mark Agius supervised the project

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