

Race in Medicine: Moving Beyond the United States

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Abstract

Debates over the use of racial categories in medicine have, thus far, been largely focused on cases and considerations occurring in the United States. However, race is used in medical settings in many places outside the US. I argue that the US focus leads to important limitations in our ability to understand and intervene on issues of race in medicine in other areas of the world. I draw on work from metaphysics of race debates to indicate why transnational continuities and discontinuities in race present a problem for US focused philosophical accounts. I then highlight the ways in which three issues prominent in the current literature on race in medicine may differ when we look to contexts outside of the US. I outline the case of race and ethnicity data in epidemiological research in the UK as a concrete illustration of important differences deserving of philosophical attention.

Keywords: Race, Ethnicity, Medicine, Epidemiology.

1. Introduction

Debates over the use of racial categories in medicine have, thus far, been largely focused on cases and considerations occurring in the United States (US). Why does this matter? Race is used in medical, biomedical, and epidemiological settings in many places outside the US. However, as racial categories and racial schemas vary depending on the geographic or national context, and the particular histories of racialisation vary, the issues that arise may differ. For example, there may be important differences in the epistemological and ethical terrain, resulting in different analyses of how and when racial categories should or could be deployed.

In this paper I argue that the focus on the US in current debates limits our ability to understand and intervene on issues of race in medicine in other areas of the world. In Section 2 I motivate the claim that the focus on the United States in debates over the use of racial categories in medicine and epidemiology leads to important limitations. I then discuss in Section 3 three issues currently alive in the literature on the use of race in research and medicine: debates over biological race,

the particular uses that racial categories are put to, and debates over social race. I highlight where the epistemic and ethical considerations may differ in contexts outside of the US. In Section 4 I outline the case of race and ethnicity data in epidemiological research in the UK, as an illustration of the ways in which different issues can arise depending on the social context.

2. Widening the Debate on Racial Categories in Medicine, Biomedicine, and Epidemiology

David Ludwig (2019) has criticised the US focus of race debates in the case of philosophical debates over the metaphysics of race. Ludwig argues that “the current literature is (implicitly or explicitly) restricted to the nature and reality of race in the United States” (Ludwig 2019: 2731). Often, this restriction is justified through the adoption of a contextualist approach that assumes that “race does not travel” (Root 2000: 631). Therefore, philosophers are justified in restricting their metaphysics of race to a specific national context, the US. However, this strategy neglects the ways in which racialization processes often have a global character. Ludwig points out that global systems of colonization and white supremacy have resulted in important global continuities. A contextualist metaphysics of race that is content to restrict itself to the US misses out on these continuities. In contrast, a unificationist approach which aims to construct a globally unified ontology based on, for example, global white supremacy, would suffer from the opposite issue: whilst a simple contextualist approach cannot account for transnational continuities, a simple unificationist approach cannot account for transnational variation. Ludwig proposes a framework for building racial ontologies that can be related to one another. He suggests ‘conceptions’, rather than concepts of race. These conceptions are bundles of conceptual connections, which vary in strength of the connection, and material property relations. This framework allows for the identification of continuities and discontinuities across contexts, as well as mapping of the strength and extent of these.

I suggest that a similar problem arises when considering the use of racial categories in medicine, biomedicine, and epidemiology. Given that the current debate is largely focused on the US, one option would be to restrict the outputs of this debate to the US. This is, as with the metaphysics case, often the implicit strategy. Whilst this is useful in terms of understanding the relevant issues in the US contexts, this means that important features of the use of race in medical and scientific settings in other geographic or national contexts are neglected. Ludwig notes this issue in the case of metaphysical projects, highlighting the assumption arising from simple contextualism that “American philosophers of race are therefore perfectly justified to limit their arguments to the US ontology of race just as Indonesian or Sudanese philosophers could limit their arguments to Indonesian or Sudanese ontologies of race” (Ludwig 2019: 2731-32). Of course, there are global hierarchies which mean that debates about Indonesian or Sudanese metaphysics of race are largely absent from venues for philosophical discussion. Limiting the discussion of race in medicine and science to the US leads to the neglect of the important ways in which racial categories are used outside of the US, as well as limiting the identification of continuities between contexts, where aspects of the US literature could be fruitfully applied elsewhere. The other option would be to straightforwardly import discussions of race in medicine into different geographic or national contexts, building recommendations or interventions based on US-focused debates. This

would face the problem of neglecting the discontinuities between contexts. Although Ludwig's framework is more suited to mapping racial ontologies than the debates over the use of race in medicine, a similar approach which aims to highlight the continuities and discontinuities across contexts would be helpful. Whilst Ludwig's argument is focused on metaphysical debates and the construction of racial ontologies, the need to understand transnational variation on questions of race also arises for epistemic and ethical questions.

It is important to note that some work has already been done to address the US focus of race debates. Examples include the edited collection *Remapping Race in a Global Context* (Lorusso and Winther 2021), and contributions to the special issue *Critical Philosophy of Race: Beyond the USA* (Atkin 2017). Nevertheless, there is more to be done in terms of shedding philosophical light on questions of race beyond the US. Furthermore, there remains a need for philosophical work on issues of race in medicine, biomedicine, and epidemiology in particular, outside of the US context.

3. Mapping Current Debates

There is a rapidly growing philosophical literature around whether and how racial categories should be deployed in a medical, biomedical, epidemiological, or public health setting. Providing a thorough overview of this literature is outside the scope of this paper. Instead, I offer brief summaries of three key issues, as illustrations of ongoing debates within the literature on race in medicine. These issues are: debates around the justification and harms of the use of the concept of biological race, evaluation of the ways in which racial categories are used in medicine, and debates concerning the justification and usefulness of the concept of social race. I outline some of the current literature on these topics, which is primarily focused on the US context. I then draw attention to some of the continuities and discontinuities that arise when thinking about questions of race in medicine in social contexts beyond the US. These continuities and discontinuities deserve further scholarly attention, in order to broaden the scope of the debates and achieve a better understanding of whether and how race should be used in non-US medical and biomedical settings.

3.1 Biological Race Debates

One prominent issue concerns the legitimacy and use of concepts of biological or genetic race, and the assumption that racial differences in some way track genetic differences. Philosophers, and scholars from other disciplines, have highlighted the many epistemic and ethical issues with race as genetic difference. On the one hand, philosophers such as Quayshawn Spencer (2018) have suggested that racial classification could play a role in medical genetics. On the other hand, many scholars have remained critical of the usefulness, both epistemically and ethically, of assuming genetic differences between races. Dorothy Roberts (2011) has argued against the use of race as a biological category in medical research and in the clinic. Others have launched similar critiques of genetic race: scholars have, for example, questioned the capacity for race to function as a marker of any medically relevant genetic trait (Root 2003), criticised the justification of racial clusters as predictors of disease risk (Lorusso 2011), and argued against the existence of racial health disparities as evidence of genetic difference (Msimang 2020). These

critiques have pointed out ontological and epistemic issues with the coherency, and explanatory or predictive power of a genetic race concept. Additionally, there are worries about the ways in which continuing to reaffirm genetic differences between races could reinforce harmful ideas of racial essentialism, and form part of a longer history of justifying racial inequality through reference to innate difference (Duster 2006).

As claims about genetic differences between human groups are universal claims (that is, they are said to apply to the human population in its entirety, without regard to differences in social context), arguments for and against the scientific legitimacy of the existence of genetic differences between groups can be said to apply universally. This is a case where the existing literature on the epistemic and explanatory justification for genetic racial differences is relevant regardless of geographic or national setting, even if the scientific findings that form part of the arguments for or against genetic racial differences often originate in the US. Arguments for the biological or classificatory significance or insignificance of the 'human continental populations' found in genetics studies (such as Rosenberg 2002) are relevant across contexts. For example, Bolnick (2008) highlights that the program used by Rosenberg and colleagues sorts the sampled data into a pre-defined number of clusters. Bolnick argues that therefore, the clusters approximately corresponding to different continents that are found when the number is set to 5 do not necessarily better represent human genetic variation than the results when a different number of clusters is selected. Bolnick suggests that Rosenberg's results align more with patterns of gradual clinal variation, rather than discrete clustering or boundaries. This argument, and others regarding the scientific meaningfulness of identified genetic populations, are not dependent on concepts of race in any particular social context.

However, this is only part of the biological race debate. Arguments about biological race usually refer to the relationship between folk concepts of race and the human continental populations that are picked out by genetics studies. For example, Kaplan (2011) argues that biologically, the populations that form folk-racial categories are not more significant than other populations that are not usually designated as races, suggesting that folk-racial categories are social rather than biological. When scholars refer to folk races, they are typically referring to the races that are identified by ordinary talk in the US. However, the groups that are picked out will differ depending on the local racial context, and these groups may not have any neat correspondence with the human continental populations typically identified by genetics studies. Nevertheless, ideas stemming from racial essentialist thinking and assumptions of biological difference can have an influence on racialised populations (regardless of whether these populations are properly considered 'races' in the US-focused philosophical debates). One example is the way in which certain Indigenous groups are treated in biomedical research. According to either the US folk racial schema, or the human continental populations identified in genomic studies, groups such as the Yanomami in Venezuela or the Hadza in Tanzania do not themselves constitute a 'race'. Nevertheless, ideas of biological difference that are rooted in longer histories of racial thinking shape assumptions in biomedical research and the way that racialised groups are investigated and characterised (Baedke and Nieves Delgado 2019; Nieves Delgado and Baedke 2021). Therefore, questions around biological race extend further than the contours of standard US-focused debates about the ways in which US folk races might or might not correspond to human continental populations.

In addition, the ethical and political dangers of assuming, affirming, or propagating a genetic race concept may vary depending on the social context. In Ludwig's (2019) framework for comparing conceptions of race, he suggests that in some settings biological properties might be an important part of a particular conception of race, and not in others. Given that the social and political impact of assuming genetic racial differences is dependent on the conception of race at play in a given context, and the local history of that conception, the ethical risks associated may differ outside of the US.

3.2 Uses of Race in Medicine

The particular ways in which racial categories are put to use in medicine also differs depending on the national context. For example, an issue that has received sustained scholarly attention is the use of race-based pharmaceuticals. The most prominent example of this is the heart drug Bidil, which was approved by the US Food and Drug Administration in 2005 specifically for use in the African American population (Krimsky 2012). This case has sparked significant debate over the legitimacy of race-based drugs, the ways in which these might uphold notions of biological race, and questions of health equity (Sankar and Kahn 2005; Brody and Hunt 2006; Cohn 2006; Reverby 2008; Roberts 2011; Kahn 2012). Whilst these debates have been fruitful and useful in the context of the response to Bidil, race-based pharmaceuticals are not widely used outside of the US. There are other ways in which racial categories are used in medicine and epidemiology in contexts beyond the US that have received comparatively less scholarly attention.

For example, practices of race correction are widespread. Race correction refers to the general practice of adjusting a measurement or threshold on the basis of a patient's race. One example is the estimated glomerular filtration rate (eGFR) equation used to measure the efficiency with which someone's kidneys remove the waste produce creatinine. The researchers who developed these equations found higher creatinine levels at the same level of kidney function in African American study participants compared to white participants. This led to the development of a 'race correction' coefficient for the equation, where Black patients' scores are multiplied by 1.159. This means that Black patients with the same eGFR score as white patients are assigned a higher level of kidney function, and may therefore be denied a kidney transplant when the white patient is recommended for one (Vyas et al. 2020). This race correction factor was recommended for use in Black populations by the United Kingdom's National Institute of Health and Care Excellence until 2021 (Kidney Research UK 2021). Although there is increasing attention to the practice of race correction in the eGFR equations in the US (Roberts 2021; Lujan and DiCarlo 2021; Velasco and Snodgrass 2021), the ways in which this has been implemented outside of the US has received comparatively little attention. For example, different modifiers have been developed for use in Asian populations (Teo et al. 2018; Matsuo et al. 2010; Delanaye et al. 2011). This version of race correction has gone largely unnoticed by scholars of race and philosophers of medicine, and yet likely raises interesting and important questions about its use. Some of these questions and implications may be the same as those for the modifier for Black patients, others may differ.

Another example of a widespread race correction practice is the adjustment of the Body Mass Index (BMI) threshold in Asian populations. The World Health Organisation's (WHO) general BMI thresholds are 25-29.9 for 'overweight', and

30 and up for ‘obese’. However, the WHO recommends an adjusted threshold of 23-24.9 for ‘overweight’, and 25 and up for ‘obese’ in Asian populations (Low et al. 2009). These lowered thresholds mean that individuals will be targeted for clinical surveillance and intervention at lower body weights. These adjusted thresholds are in operation in clinical contexts and public health messaging in, for example, India and the United Kingdom (Khadlikar et al. 2012; NHS 2022). This practice opens up questions about how these recommendations were formed and the data used to formulate them, the ways in which these recommendations assume or propagate particular notions of race, and the impact on racialised populations. It is beyond the scope of this paper to interrogate these questions here, however, I draw on this example as an illustration of a significant and widespread use of racial categories that has gone underacknowledged and underdiscussed by scholars interested in race in medicine and epidemiology.

3.3 Social Race Debates

Another issue that has received significant attention is the way that racial categories understood as social difference could be used in a scientific and clinical context. Whilst biological race is a fraught concept that has faced numerous critiques, many scholars argue that race is nevertheless socially real (Mills 1998; Haslanger 2000). Given that race is constructed socially, resulting in systematic differences in life experiences along racial lines, differences in health outcomes are predictable. Scholars have argued that racial health disparities are best explained through social difference, rather than genetic difference (Williams and Jackson 2005; Kaplan 2014). This raises important epistemic and explanatory questions about the pathways through which socially defined racial categories contribute to health outcomes, and well as ethical and political questions regarding how to acknowledge, investigate, and rectify these disparities without reifying pernicious racial myths.

Hardimon (2013) distinguishes between two race concepts at work in medicine: social and biological (what Hardimon terms “socialrace” and the “populationist concept of race”). Hardimon’s “socialrace” refers to social groups that emerge out of patterns of social relations, where socialraces are (erroneously) believed to be biological racial groups. Socialrace is a biologically salient social category, in that there can be biological and physiological effects of racial discrimination. Socialrace is a concept that enables understanding of the various causal pathways through which racial discrimination can affect health. This is related to Nancy Krieger’s (2005) notion of ‘embodiment’, which refers to the ways in which the social experience of inequality can be biologically incorporated. Scholars have suggested that we can embrace the use of social race in medicine, as a way to tackle racial inequalities, while rejecting notions of biological race and avoiding its harms.

One example comes from the work of Dorothy Roberts (2006), who argues that a race conscious approach that understands race as a sociopolitical category is necessary in order to address systemic racism and eliminate racial health disparities. Roberts advocates for a social justice approach that actively opposes harmful biological concepts of race, while continuing to collect data on health outcomes and access to healthcare by race, in order to understand and intervene on racial disparities created by systemic racial injustice. Similarly, Lorusso and Bacchini (2023) argue that race remains an indispensable tool in medicine.

Although Lorusso and Bacchini reject the claim that race is socially real, instead suggesting it is a non-referring concept, they maintain that race nevertheless drives human actions in ways that have effects on biological properties. They draw on epidemiological work to suggest that race is a ‘fundamental cause’, which affects health through a wide range of causal mechanisms. The precise causal pathways can change over time, while the fundamental relation between race and health remains. Therefore, removing race from epidemiological analysis would reduce explanatory power, and would hinder our understanding of how racism affects health outcomes. They suggest that the same holds true in a clinical setting.

Over the past few decades there has been increasing investigation of the pathways through and mechanisms by which racial discrimination can have effects on physiological processes and health outcomes. Geronimus’ (1992) weathering hypothesis suggests that the cumulative burden of a range of stressors that racially minoritized individuals experience can have physiological effects over time, driving patterns of racial health disparities. Similarly, Gravlee (2009) draws on Krieger’s work on ‘embodiment’ to critique assumptions of racial genetic difference while emphasising that social racial difference can create biological difference, through factors such as residential segregation and interpersonal discrimination. Developments in postgenomic science have implicated epigenetic changes driven by social racial difference in racial disparities in health outcomes such as cardiovascular health and chronic pain (Kuzawa and Sweet 2009; Aroke et al. 2019). Sullivan (2013) argues for the usefulness of understanding race as biological in that race becomes biological through the process of embodiment. She is optimistic about use of race in biomedical fields such as epigenetics, suggesting that “by illuminating the transgenerational scope of white racism, epigenetics can be a useful ally in that fight” (Sullivan, 2013: 212). A similar approach is taken by Kalewold (2020), who argues that an approach centred around discovering mechanisms is promising for explaining and intervening on racial health disparities. For example, Kalewold argues for the fruitfulness of drawing a causal pathway between differences in exposomes (the sum total of environmental exposures that an individual encounters through their lifetime) arising from social race and racism, in the case of differential birth weights between Black and white Americans.

However, there have also been scholars who are more wary of the use of social race in biomedical and clinical contexts, while sharing the goals of eliminating racial health disparities. Yearby (2021) has cautioned against the dangers of using social race too uncritically, without linking it directly to the harms of racism. Yearby points out that “no socially constructed race has superior health outcomes compared to any other group in all measures” (Yearby, 2021: 21). She suggests that the use of social race in epidemiological research, without an explicit focus on racism as a driver, can lead to the perpetuation of narratives of superiority and inferiority, and prevents addressing health disparities experienced by all racial groups. Scholars have also been wary of the ways in which, despite a move away from assumptions of innate racial genetic difference, epigenetics research could nevertheless lead to harmful narratives of the acquired inferiority of minoritized racial groups (Meloni 2017; Warin et al. 2020). In the context of postgenomic developments in fields such as epigenetics and microbiome science, Chellappoo and Baedke (2023) point to the propagation of simplistic narratives of racialised inferiority and damage, and assumptions of stability and fixity implicated in static social ontologies of race.

Some of this work attends to settings outside of the US, such as contributions by Science and Technology Studies and legal scholars that grapple with the ethical and political implications of epigenetic trauma narratives in the Indigenous populations in Australia and Canada (Warin et al. 2020; Saulnier et al. 2022). However, much of the philosophical debate remains focused on the US, and attending to differences between Black and white Americans in particular. How does the epistemic and ethical landscape outside of the US compare to the terrain of current debates, which are largely US-focused?

Continuities between considerations arising out of the US-centred debates around the use of social race in medicine are certainly present across a range of contexts. Social race is salient across the world, although particular racial schemas differ. Racially minoritized groups have systematically different life experiences, which can drive racial health disparities.

However, there can also be meaningful differences. In Section 3.1 I highlighted the ways in which the US-focused debate on biological race, assuming US racial schemas, neglects the ways that assumed biological difference can be part of the racialisation of groups other than human continental populations. When considering the use of social race in medicine, a similar issue arises in terms of the focus on US racial schemas. There can be racialised groups that have poorer health outcomes based on the effects of racism or discrimination on their life experiences and physiological processes, that do not fall into what is typically considered to be a social 'race' in the US-centric debate. In Section 4 I use the case of epidemiological and public health research in the UK to indicate how the complexities of race and ethnicity open up questions about when social race should be used.

Additionally, there can be a danger of seeing race as a unique cause in biomedicine. The mechanisms by which social race is proposed to lead to racial health disparities are not unique to racial discrimination per se, but arise from the combined effects of factors such as poverty, exposure to environmental pollutants, and increased stress from interpersonal discrimination. For example, racial discrimination can lead to increased psychosocial stress, which can lead to epigenetic changes that contribute to poorer health outcomes later in life (and possibly in the next generations). However, racial discrimination does not leave a unique epigenetic mark, and a variety of causes of increased psychosocial stress can have similar results. This is not to downplay the importance of race and racism as a driver of health disparities, but rather to point out limitations in biomedical research, such as postgenomics research investigating racial differences in epigenetics and the microbiome. The findings within this research indicate assumptions of static racial ontologies, that prevent making connections between research on the biological harms of social races and the biological effects of other social hierarchies (Chellappoo and Baedke 2023). For example, India is a relatively racially homogeneous country, if understood in terms of US racial schemas or human continental populations. However, ethnicity, religion, and caste remain powerful social stratifiers, driving differences in health outcomes (Deshpande 2000; Dutta et al. 2020). In this case, similar epigenetic mechanisms could also be at play, although research along these lines has been limited.

Furthermore, by focusing on the ways in which the connection between social race and health is at play within a given national or geographic context (most often the US), there can be a neglect of how race travels across contexts, and the complexities involved when particular tools, research, or recommendations are

made to travel from one place to another. Returning to the example of lowered BMI thresholds for South Asians described in Section 3.2, these are recommendations made by the WHO and applied in many different countries. Different countries have different racial schemas and histories of racialisation, and the appropriateness of the use of racial categories here (whether in terms of epistemic justification or ethical implications) may well vary. We could expect that the implications of using a lowered BMI threshold in country where social races can be highly salient for understanding inequalities, such as the UK, will differ from the implications in a country that is relatively racially homogenous, such as India. Tracing the way race is used in medicine and biomedicine across contexts requires the kind of approach that Ludwig (2019) argues for in the context of ontologies. Rather than restricting our thinking to a given setting, an appreciation of the continuities and discontinuities will allow for a deeper understanding of the ways in which race-based medicine gets imported and exported across national boundaries.

In terms of the ethical and political implications, there will also be important differences depending on the social context. For example, in France and Germany, statistics are not collected according to race (Olterman and Henley 2020). This became a pressing issue during the Covid-19 pandemic, when the lack of data about racial disparities in the burden of the virus hindered the development of strategies targeting vulnerable populations (McAuley 2020). This is an importantly different political landscape to the US where, for example, the National Institutes of Health have mandated the reporting of clinical research findings in terms of race since 1993 (Roberts 2006). In places where the notion of fixed biological or genetic difference is particularly central to the local concept of race, it may not be possible (or may be significantly more difficult) to introduce racial categories in research and clinical settings without reinforcing these notions.

In the following section I make the differences between considerations in the US context and in others more concrete by looking at the case of the use of racial and ethnic categories in the United Kingdom (UK). I highlight some epistemic and ethical issues in this setting that are under-discussed in the US-focused literature.

4. Race and Ethnicity in the UK

In the US, data on race is typically collected according to the Office of Management and Budget (OMB) categories: white, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander. It has been argued that these races generally correspond to human continental populations detected in genomics studies (Spencer 2014). There is also often the option for an individual to separately record their ethnicity as Hispanic or Latino (or not). In contrast, in the UK, statistics are often collected according to finer-grained ethnic groups. For example, a 2021 report on health disparities collected and analysed data according to the following categories: mixed, white, Black Caribbean, Bangladeshi, Black other, Indian, Pakistani, Black African, Other, and Asian other (Raleigh and Holmes 2021).¹ This is not only a difference in what

¹ This is not as standardised as in the US. For example, some studies use what would be typically understood as racial categories: white, Black, and Asian (e.g., Teagle et al. 2022; Lee et al. 2023). Other studies use ethnic categories, although they may differ slightly from those in the Raleigh and Holmes (2021) report (e.g., Nazroo 2004).

categories are used and reported on, but has meaningful epistemic and ethical implications.

In this section I focus particularly on the evidence of health disparities amongst those who would be racially categorised as South Asian, who are of Indian, Pakistani, or Bangladeshi ethnicity. I suggest that the differences in health outcomes between different ethnic groups raises interesting questions about when to aggregate data by race and when to disaggregate it by ethnicity. I also argue that this warrants greater attention to the complexities introduced by the fluid concept of ethnicity, in the context of the use of ethnic categories in epidemiology and medicine. These complexities are both epistemic and ethical in nature.

4.1 Race Versus Ethnicity

Across epidemiological studies analysing health disparities in the UK, many studies collect data according to ethnic groups, including the categories of Indian, Pakistani, and Bangladeshi. Some studies use broader categories, either referring to South Asians (Mathur et al. 2020), or Asians (Teagle et al. 2022). These are plausibly racial categories, or perhaps multi-racial categories in the case of ‘Asians’. The reasoning behind the methodological choices to use either racial or ethnic categories are not always clear within the studies themselves, although in some cases it may be influenced by pragmatic concerns about the need to aggregate small samples of minority groups.

Across a range of health metrics, Bangladeshi and Pakistani groups have poorer health outcomes compared to both white British groups and Indian groups (Watt et al. 2022). On some measures, the comparison between Indian people in the UK and white British people show a much smaller disparity, and for some outcomes this disparity is reversed (Bécares 2013; Watkinson et al. 2021). This is unsurprising given the landscape of the interaction between ethnicity and socio-economic disadvantage: 19.3% of Bangladeshi and 31.1% of Pakistani individuals live in the most deprived 10% of neighbourhoods in England, compared with 7.6% of Indians and 9.1% of white British individuals. In addition to the differing histories of migration by South Asian ethnic groups to the UK and differing average migrant backgrounds, resulting in different patterns of socioeconomic disadvantage, individuals of Bangladeshi and Pakistani origin within the UK may face additional barriers. This includes Islamophobia or anti-Muslim discrimination, which often has a racialised dimension (Meer and Modood 2010).

However, it is also the case that, in the UK, South Asians (the wider group that includes people of Indian, Pakistani, and Bangladeshi ethnicities) are racialised and, to an extent, experience discrimination as a racial group (in addition to particular ethnic differences). This shared experience of discrimination can have effects on health and interactions with the healthcare system. For example, Hackett et al. (2020) found experiences of racial discrimination across ethnicities within the South Asian group, and corresponding impacts on mental health. Additionally, cultural stereotypes that are applied to South Asians as a group may impact healthcare provider behaviour (Burr 2002).

This landscape raises the question of when epidemiologists and health disparities researchers, as well as those involved in policymaking and public health messaging, should be using the aggregated racial category of ‘South Asians’, and when they should be using disaggregated ethnic categories in order to track disparities and target interventions. On the one hand, addressing differences between

South Asian ethnic groups is important, particularly along some health measures where disparities are particularly pronounced. On the other hand, there may be pathways that are affecting health on the level of the racial group, rather than the ethnic group, such as through shared racial discrimination. For example, in the literature described in the previous section on the mechanisms by which racism could affect physiological processes, the focus is on how social racial categories ‘get under the skin’ and drive health outcomes. Given that South Asians constitute a social race in the UK, and experience racial discrimination as a group, it would seem that this racial discrimination could be affecting health through similar causal pathways. An approach that consistently disaggregates into the individual ethnic group will fail to adequately capture these pathways.

Questions of how to respond to differences within a racial group have been raised within the race in medicine literature. Sean Valles (2012) has highlighted the problem of heterogeneity within racial groups in the US context, particularly with respect to differences in risk. Valles points to the difference in rates of hypertension between Black Americans born in the US, and Black Americans born outside of the US, as well as significantly lower rates of cystic fibrosis in white individuals of Finnish ancestry compared to other white individuals. These are cases where within a given racial group, there can be significant heterogeneity. Valles argues that this leads to the question of choosing a level of specificity in determining a public health target population. Increasing the level of specificity could reduce resource waste, as well as undermining naïve racial essentialism. On the other hand, specificity cannot be increased indefinitely, given limitations of data availability and other pragmatic concerns (also see Valles 2016).

To some extent, these are similar problems as to the one that arises in the UK case, in that this raises questions of the level of specificity. In addition, while studies that do disaggregate commonly use the categories of Indian, Pakistani, and Bangladeshi, further specificity is possible. For example, past studies have included the categories of Gujuratis and Punjabis, ethnolinguistic groups in India and Pakistan (Bhopal 2000).

The existing work on heterogeneity of risk notwithstanding, the difficult problem of when to aggregate or disaggregate according to racial or ethnic group is underdiscussed in the current literature. It is outside of the scope of this paper to provide an argument for a particular solution; however, I highlight this as an indication of an issue that has particular prominence in a context outside of the US.

4.2 Implications of Ethnicity

Valles (2012) indicates that raising the level of specificity, for example from ‘African Americans’ to ‘US-born African Americans’ in the case of hypertension targeting, would help to correct misguided biological racial essentialism. While this may be true in that case, the ethical or political implications are less clear in the case of using racial or ethnic categories in epidemiology or public health in the UK.

Ethnicity is a concept with both similarities and differences to race. Ethnic groups can sometimes be disentangled from racial groups (as with the various ethnicities that could be said to fall within the South Asian racial group in this case). However, ethnic groups can also face racialised prejudice and discrimination, and older racial narratives can affect the characterisation and treatment of ethnic groups, such as in the case of racialised Islamophobia. It is therefore not clear that increasing the level of specificity from a broader racial category to

narrow ethnic categories would completely or significantly defuse negative attitudes stemming from racial histories and hierarchies.

Whilst there are similarities and entanglements, there are also some potentially relevant differences. Ethnicity has been under-theorised by philosophers, in comparison to accounts of race. However, there have been some accounts of ethnicity proposed by philosophers, who generally take Hispanic or Latino ethnicity within the US as a starting point of theorising. One such account comes from Jorge Gracia (2005), who proposes a 'familial-historical' view of ethnicity. On Gracia's view, ethnicity is 'familial' that it involves Wittgensteinian family resemblance, where sets are defined not by a single common feature, but by a common set of features, where members share in at least part of the set. Ethnicity is also 'historical' in that the common features that make up this set have historical significance. Ethnic groups are therefore sets of people that result from historical processes; these historical processes have developed particular kinds of relations between individuals. These features or relations will often be cultural, including shared traditions and cultural history.

Many definitions or uses of ethnicity include such a cultural component, and this cultural component may be foregrounded in comparison to a biological component in the concept of ethnicity. This may be in contrast to the concept of race in some contexts. This could lead to differences when considering the ethical or political implications of the use of ethnic categories in medical contexts. On the one hand, the cultural component of ethnicity may mean there is (sometimes) less risk of 'biologising', and promoting narratives of innate biological inferiority. However, this same cultural component opens up the door to stigmatizing cultural explanations or kinds of cultural essentialism, which can be equally harmful. Here, it may be the case that singling out (predominantly Muslim) Bangladeshi and Pakistani groups for particular targeting has stigmatising effects when considering racialised Islamophobia and cultural stereotypes.

Understanding the complex epistemic and ethical considerations at play here and determining when and for which purposes racial or ethnic categories should be used in UK epidemiology and public health requires significant further work. I have highlighted some possible considerations here in order to emphasise that different considerations can arise in the UK context in comparison to the US context, and that these issues are under-theorised and under-discussed in the currently US-focused literature. The UK is an example of a context which we might expect to have significant continuities with US racial discourse, however, even here context-specific issues arise. There are likely to be even larger differences in the considerations involved in the use of race in medicine when looking at other places around the world. These differences deserve philosophical attention, to the extent that philosophers of race and medicine can contribute to minimising harms and promoting justice.

5. Conclusion

I have suggested that debates over the use of race in medicine, biomedical research, epidemiology and public health have so far been largely focused on issues arising in the US context. However, the use of race in medicine and biomedicine in itself has not been similarly restricted. Race is used in these settings in many places around the world.

I have argued that there are important limitations that have arisen from the focus on the US in current debates, drawing on work from metaphysical race debates. This is in part because racial categories and racial schemas vary depending on the geographic or national context. This can lead to differences in the epistemic or ethical landscape, which alters which considerations are most salient, and alters the analysis of whether or when racial categories should be used.

I have highlighted three issues prominent in current debates around race and medicine: debates over biological race, the particular uses that racial categories are put to, and debates over social race. I have given indications that there may be different epistemic and ethical considerations within these debates when we look beyond the US. Finally, I have considered the case of race and ethnicity data in epidemiological research in the UK as an illustration of differences in the landscape of considerations. A particularly salient consideration in this context is the level of specificity of data collection or targeting, which incorporates both epistemic and ethical issues.

Much important work has been carried out in terms of evaluating and influencing the use of race in medicine within the US. Some of the work has also had important impacts beyond the US. However, there is more to be done. The health and healthcare of individuals around the world is impacted by the use of racial or ethnic categories, often in unique ways which have so far been under-attended to. This paper is intended as a motivator for future work: a perspective that looks beyond a single country is necessary in the path towards improvements that are not restricted to a single country.²

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