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Racism in Medicine: Patient Care and Service

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Introduction

Both the Black Lives Matter movement and the COVID-19 pandemic have brought questions of racism to the forefront of discourse. Backlash in response to the Black Lives Matter movement through the popularisation of the phrases "all lives matter" and "blue lives matter" has further demonstrated the fact that racism is still prevalent in modern society. The higher mortality rate of black patients with COVID-19 compared to white patients[1] has highlighted the structural inequalities in healthcare and the urgent need for further research into these inequalities. Racism is apparent in every level of the healthcare system, from education, to employment, to patient care, but the history and evolution of racism in healthcare is long and complex. Racial inequality in healthcare is inextricably linked with socio-economic and cultural factors. Although further research is required to fully understand these intersections, the data that is currently available does begin to shed some light on the ways in which this racism manifests.

Historical context: race science

There is a long history in the medical sciences of categorising subjects by race and pointing to biological phenomena that set white and black people apart[2,3]. Polygenism was the prevalent 19th century theory that posited that each race originated separately from other races. Polygenism went hand-in-hand with a view that racial differences were significant enough (and grounded in biology) to warrant identification as a separate species. It is often regarded as the theory that gave birth to scientific racism[4]. This history of scientific racism has continued right into the modern era with Murray and Herrnstein's 1994 book The Bell Curve, which drew connections between race and intelligence and conflated race and genetics in the process. In line with historical scientific racism, Murray and Herrnstein regarded black people to have, on average, a lower IQ than white people. Scientific racism has often been used to claim that race could be linked to intelligence, temperament etc., and white scientists would invariably draw conclusions that championed ideas of white superiority (Figure 1). However, such views have been rejected by modern scientists[5-8].

One such critic is Angela Saini, whose book Superior: The Return of Race Science warns that racism is still prevalent in science. Saini, an independent science journalist and author, argues that scientists are quick to look to biology to explain our differences because it is familiar[9]. In our society, race is always seen as significant - as an indicator of who a person is, or what you can expect

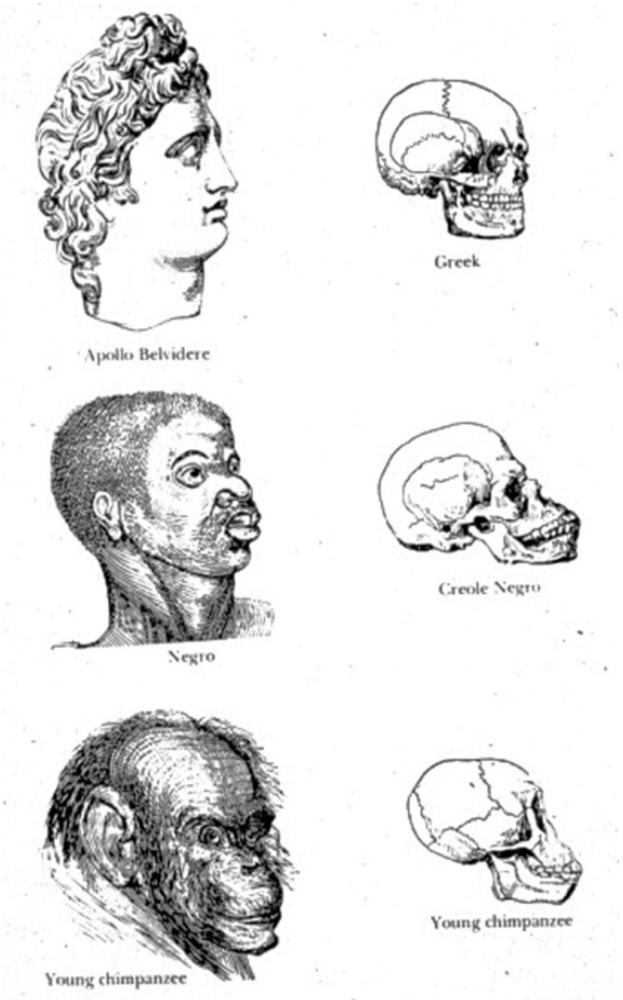

Figure 1: Illustration from "Types of Mankind" (1854), demonstrating tendency to conflate race and species and use these "observed" traits to assert white dominance over black people.

from them. We are all conditioned to hold racist biases, whether conscious or not. But Saini highlights the flaw in approaching race as a biological phenomenon that can be identified through genetics by drawing attention to the idea of race as a social construct, rather than a biological one:

"[Duana Fullwiley] noticed that all the scientists were routinely using racial categories not only to select their subjects, but to confidently pick out statistical differences between these racial groups. So, as Fullwiley observed, she

	Total maternities 2014-16	Total deaths	Rate per 100,00 maternities	95% CI	Relative risk (RR)	95% CI
IMD Quintiles						
I (Least deprived/highest 20%)	276162	9	3.26	1.49 to 6.19	1 (Ref)	-
II	306896	17	5.54	3.23 to 8.87	1.70	0.72 to 4.33
III	349005	35	10.03	6.99 to 13.95	3.08	1.45 to 7.28
IV	422310	50	11.84	8.79 to 15.61	3.63	1.77 to 8.40
V (Most deprived/lowest 20%)	510542	54	10.58	7.95 to 13.80	3.25	1.59 to 7.48
Ethnic group						
White	1,529,881	123	8.04	6.68 to 9.59	1 (Ref)	-
Asian	199,661	29	14.52	9.73 to 20.86	1.81	1.16 to 2.73
Black	85,735	34	39.66	27.47 to 55.41	4.93	3.27 to 7.26
Chinese/other	75,235	4	5.32	1.45 to 13.61	0.66	0.18 to 1.74
Mixed	30,639	5	16.32	5.30 to 38.08	2.03	0.65 to 4.87

Table 1: maternal mortality rates amongst different population groups[12].

asked each scientist she interviewed one simple question: 'How would you define race?' Not one of them could answer the question confidently or clearly."[9]

This idea of race as a social construct has become a popular one in recent years, with people now arguing that what we have commonly come to accept as a definition of race relies predominantly on the colour of a person's skin rather than concrete biological markers[10]. This perspective on race leads us away from the possibility of attributing racial inequality in health as some kind of biological inevitability and forces us to acknowledge it as a man-made problem.

Inequalities in patient care

Research has shown that the maternal mortality rate is almost five times higher for black women compared to white women[11,12], while the maternal mortality rate for women from socio-economically deprived backgrounds is three times higher than for those from the least deprived backgrounds (Table 1). Further research is required to fully understand the cause for these disparities, but Deidre Cooper Owens, a professor in the history of medicine at the University of Nebraska-Lincoln, would argue that racial bias lies behind disparities in both diagnosis and treatment of black patients, saying that it "comes from a time when doctors had essentially been socialised not to respect black people as human beings[…]It's about biased assumptions – and we doctors have the same biases as anyone else."[11]

Cooper Owen's arguments are supported by further data on the diagnosis and treatment of black patients. In mental health, primary care doctors have more difficulties in diagnosing depression in black patients, confusing depression with other physical conditions such as diabetes[13]. Data from 2004 found that the proportion of people aged 61-70 reporting fair or bad health was 34% for white English people, but 86% for Bangladeshi people, 69% for Pakistani people, 63% for Indian people, and 67% for black Caribbean people.[13] Furthermore, black patients are less likely to be prescribed pain medication for non-definitive conditions (i.e. conditions that don't have such objective clinical presentation and aren't as easily confirmed with simple diagnostic tools)[15,16]. This disparity doens't exist for definitive conditions, implying that racial bias was a factor in the decision of whether to prescribe pain relief or not. Evidently, the disparities in diagnosis and treatment of black patients versus white patients exist across genders and age groups. These are not isolated incidents, but are symptomatic of a greater structural and systemic issue.

The medical curriculum

Underpinning these issues is the lack of inclusivity in the medical curriculum. Senior year medic Malone Mukwende noticed while at medical school that diagnostics about diseases were grounded in white skin. Mukwende was taught to use blue lips to identify oxygen deprivation and red rashes to diagnose skin disorders, but he recognised that these diagnostic tools were effectively useless to most of the global population[17]. Studies have shown that black skin tones are severely underrepresented in medical textbooks, with dark skin tones being featured in as little as 1% of textbook images[18]. This lack of representation is reinforcing racial bias in our doctors, as they are being trained to recognise symptoms in white bodies at the expense of understanding how to properly diagnose black patients. If we want to produce doctors who are culturally competent and have the skills and tools needed to provide a high standard of care to all patients regardless of race, this is something that needs to be address. Mukwende has been working on a project to produce a booklet called Mind the Gap, which aims to educate medical students on how clinical symptoms present in patients with dark skin tones.

Conclusions

Research has demonstrated that defining race in genetic terms is flawed and misleading[19,20]. But continuing to use race as a signifier in this way has allowed us to ignore the impact of socio-economic factors and racial

discrimination on patient health. In reality, racial inequality in health is not biologically inevitable: it is an issue that has been created by a systemically and structurally racist society, and that racism is now embedded not only in our healthcare system, but in all the systems that govern social and economic opportunity. Some researchers conclude that socio-economic status is the biggest factor in healthcare inequality[21], however analysis that would rank factors in a kind of hierarchy lacks nuance. The links between race and socioeconomic status[22] and between socio-economic status and healthcare outcomes[23] are evident, and race and socio-economic status interact in ways that affect health. It is this interaction that requires more research to be fully understood[24].

It is difficult to propose solutions simply based on an examination of patient care. Instead, a closer look at racial bias that exists in the education of young medics and in medical workplaces is necessary. These are areas that will be examined in further detail in the next issue in the hopes of better understanding what first steps could be taken to create a healthcare system that is more inclusive.

Conflicts of interest

None.

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