Systemic racism and medicine: A commentary

A reflection on historical mistakes that we must recognize and learn from to catalyze positive change.

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The year 2020 was fraught with tragic events that brought social injustices into the spotlight worldwide. Following the deaths of George Floyd and Breonna Taylor, directly due to the actions of local police, and what can only be described as the racially targeted killing of Ahmaud Arbery, the Black Lives Matter movement gained significant momentum in the United States, and with it, calls to address the enduring inequities rampant in modern society. But social injustice and racism are not restricted to the United States. This year alone saw the brutal recorded assault of Indigenous Chief Allan Adam at the hands of police in Alberta; the fatal and independent shootings of two young Indigenous people, Rodney Levi and Chantel Moore, by police in New Brunswick; and the recent recorded evidence that Indigenous patient, Joyce Echaquan, endured appalling racist and insulting comments from health care professionals as she was dying in a Quebec hospital. These Canadian incidents were covered by the media but probably represent the tip of the iceberg; many incidents most likely go unreported to authorities or the media.

These incidents are rooted in institutionalized and societally accepted racism that goes back centuries. The legacy of slavery and the long-standing Jim Crow laws in the United States, and the government sanctioned, enforced residential school system imposed on Canadian Indigenous communities, have created social-economic inequities and multigenerational trauma. Social injustice affects individuals beyond those of African or Indigenous background, and is not limited to racial inequity; other groups including women and the LGBTQ community similarly continue to face discrimination and bias.

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The World Health Organization defines social determinants of health as "the conditions in which people are born, grow, live, work, and age." Although these circumstances exert their effects on the individual, they are shaped by structural phenomena. Slavery and colonialism in the US and Canada has produced a legacy of racism, injustice, and brutality that pervades medicine as it does all social institutions. Racism and discrimination are deeply ingrained in our society and represent significant social determinants of health—a truth that is backed by a growing body of evidence that highlights disparate health outcomes in racial minorities. While physicians and other health care workers are committed to providing the best care and treating all patients equally, systemic racism exerts its effects subconsciously and insidiously.

The 1932 Tuskegee Study serves as a historic example of the ideological effects of systemic racism in academic medicine, which allowed for this shameful experiment to take place in the name of medical science and the "greater good." In this study, 600 African American men from Alabama, 399 of whom had syphilis, were enlisted to partake in an experiment intended to observe the natural history of untreated syphilis in Black populations. The study was conducted without the benefit of patients' informed consent, and participants were simply told that they were receiving treatment for "bad blood"—a colloquial term used to describe syphilis, anemia, fatigue, and other ailments. Individuals who enlisted in this study over its course of 40 years were given ineffective medicines and denied proper treatment. The study is blamed for significantly impacting the willingness of Black individuals to participate in medical research today. It is estimated that the life expectancy of Black men also fell by up to 1.4 years following the release of the study's details, in part due to a seeded mistrust in the health care system that remains today.[1]

One contemporary study[2] showed that Black patients are more likely to trust and heed the advice of Black physicians compared to

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physicians of a different race. The researchers estimated that Black physicians could reduce the cardiovascular mortality gap between Black and White patients by 19%, but Black patients have a much lower chance of finding a racially concordant physician compared to White and Asian American patients. At the same time, ethnicity cannot be ignored in medicine. Treating patients the same or equally does not imply equity; doing so ignores the disparities that have existed for generations and continue to exist today. Recent calls for ethnically inclusive medical education have been made after attention was brought to the fact that darker skin tones are underrepresented in images showing dermatological manifestations of disease. In the wake of COVID-19, which is disproportionately affecting communities of color, physical findings such as the "COVID toes" rash have been presented in medical literature only in individuals with a lighter skin color.

As in America, Canadian academic medicine contains examples of unethical research and poor treatment of minority groups. Ian Mosby[3] recently brought to light the series of nutrition research experiments on approximately 1000 Canadian Indigenous children that took place between 1942 and 1952 across six residential schools. These experiments were initiated to investigate the effectiveness of various nutritionally fortified foods in the diets of Indigenous people after widespread hunger and malnutrition in Canadian residential schools was noted in the early postwar period. Groups of malnourished children were denied adequate nutrition while others were fed food formulas deemed illegal for sale to the general public due to violation of food adulteration laws. Some groups were even subjected to supplement regimens of vitamins alone in order to observe the physical manifestations of malnourishment.

The lasting effects of systemic racism resulting in inequity are reflected in current health data. Indigenous people are among the highest risk groups for developing diabetes and its complications, and are overrepresented in HIV, tuberculosis, and sexually transmitted infection cases. The stroke rate is nearly twice in the Indigenous population compared to non-Indigenous Canadians, and the suicide rate among Indigenous youth is 5 to 7 times higher than in their non-Indigenous peers.

Today, safeguards exist to protect the well-being and rights of those who volunteer for medical research, and they are enforced by institutional research ethics boards. This does not, however, alleviate the mistrust felt in affected communities that was created by deplorable research efforts of the relatively recent past. Today, it is generally accepted that research involving the Indigenous community must be done in consultation with representatives of

the community, the outcomes of the research must be available for dissemination to the community, and the research must be of potential benefit to the community.

What can we do?

As health care professionals, we interact with individuals from all ethnicities, genders, religions, and social backgrounds. We play a direct role in the type of care they receive, and, in doing so, directly influence their health outcomes. Therefore, we first have an individual and collective responsibility to understand the roots of contemporary health disparities so that we can fight the systemic racism that exists. Next, we must define and understand what racism is. Racism can present in many ways, and it is not limited to the blatant events seen in the media. Perhaps its most dangerous form is subconscious bias, which can subtly influence how we interact with others and how we, in turn, are treated, all without us realizing its effects. To overcome this, we must be conscious of our interactions and carry an open and willing attitude to identify and control our implicit biases. We must also learn to manage overt bigotry safely and educate our peers on how to do the same. All instances of discrimination, bias, prejudice, and ignorance that arise should be firmly rejected. Finally, we must continue to plant the seeds of change so that our efforts are not short-lived. Educators must continuously evaluate their learning materials and develop curricula that ensure equal representation of all people for all levels of medical education. Our medical schools should continue to promote cultural sensitivity and encourage future physicians to practise and model tolerance, respect, kindness, and open-mindedness. ■

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