EClinicalMedicine 36 (2021) 100921

Contents lists available at ScienceDirect

EClinicalMedicine

journal homepage: https://www.journals.elsevier.com/eclinicalmedicine

Commentary

Structural integrity: Recognizing, measuring, and addressing systemic racism and its health impacts

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ARTICLE INFO

Article History:
Received 30 March 2021
Revised 22 April 2021
Accepted 6 May 2021
Available online 3 June 2021

For centuries racism - a system of advantage where opportunity and value are assigned based on socially constructed categories of "race" - has contributed to human division, conflicts, and suffering [1]. Racial and ethnic inequalities in health, education and life chances are well-documented, and are deeply rooted in colonization, legal subordination, degradation, displacement, genocide and enslavement of targeted populations [2].

We cannot achieve health equity without addressing systemic racism. While racism operates on multiple levels (Table 1) [3] it is perpetuated and reinforced at a structural level. Systemic racism operates through interconnected policies, institutions, and practices that are rooted in history, culture, norms, and ideologies that maintain and justify inequality [4]. Systemic racism unites closely associated terms, institutional and structural racism, and the norms perpetuated in society to designate unequal value of individuals and groups based on their race, ethnicity, and immigration history.

Racist and xenophobic tropes elevated during the COVID-19 pandemic have fueled racial/ethnic motivated violence in the United States (U.S) [5]. This rising violence reinforces the importance of intersectionality for understanding systemic racism. Racial and ethnic inequalities in health are now understood within the context of racism intersecting with other forms of social marginalization [6]. Racism and its effects can differ within social characteristics such as sex (e.g., physical violence is more likely against men, and sexual violence more likely against women). Aggregated marginalization (sexuality, gender, disability, social class, religion, race/ethnicity) compounds differential risk for adverse social exposures and structural conditions. Hence systemic racism is intersectional. We must recognize social oppressions are interconnected, linked by power dynamics and maintained by social stratification [6].

Systemic racism affects personal health and health systems. With regard to personal health, systemic racism breeds trauma and elevates risk for psychosocial stress. It also reduces access, impairs environmental conditions, and restricts opportunities for social mobility. Chronic exposure to social and economic disadvantage can lead to premature cellular aging through increased allostatic load and compromised immunity [7]. Racism also increases risk for "toxic stressors" —which includes violence exposures, family and community instability and conflict, forced institutionalizations (incarceration), and poverty—across life stages. These toxic stressors combined with inadequate support negatively impact health and development [8]. Simultaneously, health systems contend with institutional racism. Health institutions maintain under-representation of certain groups, such as Blacks and Hispanics, among physicians and specialists, and over-representation of these in highly burdened and lower paid front-line providers such as nursing aids and technicians. Equitable professional development and advancement opportunities are not prioritized at an institutional level [9]. Consequently, decision-makers in health care are less likely to be people of color, and this may in part explain why we see greater distrust and under-utilization of health care services [10].

Given the fundamental importance of systemic racism as a key determinant of health, we need to be able to measure it. Primary strategies for measuring racism include self-reported experiences of discrimination and capturing racism as a social stressor. These strategies limit our understanding to internalized and interpersonal racism, not systemic racism. In order to improve our understanding of systemic racism and its health impacts, we must: (1)Measure the broader scope of systemic racism pathways - economic, environmental, and political injustice; inadequate health care; violence and trauma; and state-sanctioned violence; [2] (2)Measure perceived social norms related to the acceptability of racism and stereotyping the operationalization of norms in institutions, such as police or healthcare; (3)Develop and use measures to capture diversity and intersectionality. Incorporate nuanced metrics of racism, such as migration and citizenship, intergenerational effects, and period-

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https://doi.org/10.1016/j.eclinm.2021.100921

Table 1
Levels of racism.

Levels of Racism[3]	
Internalized racism	Internalization of inferiority or superiority based on one's race/ethnicity and rooted in larger social norms and ideologies on race/ethnicity.
Interpersonal racism	Differential treatment (discrimination) or negative attitudes or beliefs (prejudice) toward racial/ethnic groups that influence interpersonal interactions between individuals and among groups (within and across difference) that reflect their internalized racism and advantage an ideologically 'superior' racial group (such as, White people).
Institutional racism*	Occurs within institutions and systems of power and refers to the discriminatory or unfair policies and discriminatory practices of particular institutions, such as school, hospitals, banks, or workplaces that reproduce racial/ethnic inequalities in outcomes in ways that advantage one racial group over other racial/ethnic groups.
Structural racism*	Involves the cumulative and aggregated effects of racism, based in and supported by the history, culture, and ideologies within a society and resultant policies, laws, social forces, and institutional practices that systematically advantage White people over other racial/ethnic groups or defining them as "the norm".
Systemic racism*	An organized system of generating and perpetuating opportunities within society differentially based on racial hierarchy. It includes norms, ideologies, culture and history, as well as interconnected institutions, policies, laws and structures that designate and maintain differential and unequal value of individuals and groups based on their race.

* Systemic, structural, and institutional racism are terms that are sometimes used interchangeably.

specific (e.g., post-hate crime) contexts; (4) Create equitable research partnerships with communities most negatively impacted by systemic racism.

At the same time, given that systemic racism is part of the very foundation upon which the US was built, with resultant inequalities in education, housing, criminal justice, and health, there is need to dismantle this foundation. To advance change we must eliminate systemic racism and White supremacy. In health care this means: (1)Using a systemic racism lens in care provision and training to reconsider the role of race-related adversities to health over the life course, with an intersectional lens; [8] (2)Engaging in a systems-level approach to address systemic racism as a public health epidemic/pandemic, in our medical and public health systems/institutions by incorporating anti-racist policies and improving trustworthiness; (3)Making reparations, by improving funding to higher education pipelines from lower academically performing schools, creating economic and housing incentives to put people of color on an equitable level, and dismantling policing and incarceration systems that do little to maintain a safe society. *Structural integrity,* applying a systemic racism lens and intersectionality deliberately and methodically in research and practice to understand how inequity is constructed, operationalized, and perpetuated, can advance anti-racist practices and racial equity.

Contributors

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Declaration of Competing Interest

The authors have no conflicts of interest to declare.

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