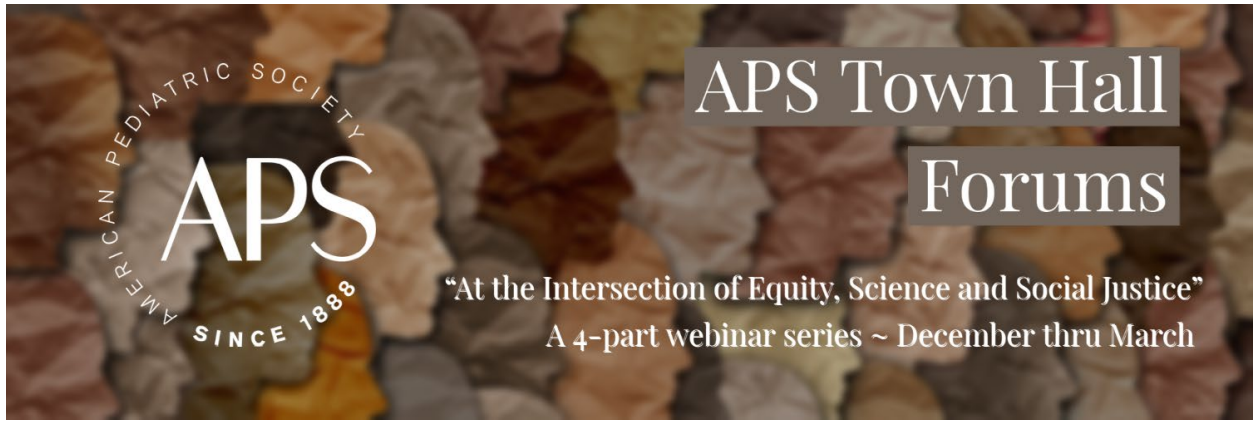
OUR LATEST INITIATIVES!

- APS Town Hall Forums – At the Intersection of Equity, Science and Social Justice – series of webinars to help identify critical issues regarding the roles and approaches of academic medicine and to develop more successful strategies to achieve goals of improving child health by developing more expansive approaches in medical education, training, research and clinical care.



- APS SPR Virtual Chat Series - webinar series presenting timely and critical issues regarding academic pediatric medicine by outstanding leaders, including medical school deans, CEOs, Chairs, Vice-Chairs, Section Chiefs, Heads of Research Institutes and others, whose diverse experiences have provided exceptional and highly impactful guidance to our field.

Journeys & Frontiers in Pediatric Research

- APS SPR Journeys program features nine small competitively- selected cohorts guided by leaders drawn from the diverse membership of APS and SPR
- Over 6 sessions, participants hear inspiring stories, receive career development advice and feedback on research, and network with a diverse and inclusive group of peers and experienced leaders in academic science
- Join the closing plenary featuring Dr. Kevin Churchwell, MD and Martine Rothblatt, PhD, JD, on May 17, during PAS 2021 Phase II. This session is open to all PAS 2021 registered attendees.

Learn More

APS Racism Series

- APS Issue of the Year - Racism & Social Injustice as Determinants of Child Health
- Holistic Promotion of Scholarship and Advancement
- Organizational Solutions: Calling the Question
- Racism as a Public Health Issue

Pediatric RESEARCH

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COMMENT

Racism and social injustice as determinants of child health: the American Pediatric Society Issue of the Year

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We are now experiencing extraordinary challenges that are adversely impacting the health and well-being of our children and their families. These include multiple and very inter-related issues: coronavirus disease (COVID), Black Lives Matter, the struggling economy, immigration, environmental toxins, child abuse, gun violence, and others. Beyond responding to the complex acute stresses of clinical disease, the COVID pandemic has further unmasked chronic issues of racism, social injustice, disparities, and inequities that permeate our health care system.[1–7] For example, the disproportionate effects of COVID in Black, Latinx, and Native Americans is reflected by a greater susceptibility for disease, hospitalizations, and mortality with infection.[8,9] Such findings reflect many factors, including racial differences in jobs and exposures, nutrition, and other chronic health illnesses, such as diabetes, obesity, cardiovascular diseases, and chronic obstructive pulmonary disease. Well beyond the COVID pandemic, discrepancies in maternal, child, and adult health care, leading to death at earlier ages and worse morbidities, have been long recognized as reflecting major inequities in availability of health services, insurance coverage, social and economic factors, and other issues.[2,4,6] Thus addressing concerns underlying structural racism and sustained inequities in health care requires a greater awareness of the persistence of the US as an unequal society.[1–3]

As pediatricians, we know that racism and social injustice are endemic in our society and have adversely affected many aspects of child health and well-being, with clear evidence of life-long consequences.[2–6] These include worse perinatal outcomes for both mother and child, higher rates of childhood disease-related morbidities, and the persistence of adverse effects on health into adulthood.[10–14] Clearly, there is an especially important imperative for pediatricians and child health providers to play in addressing racism, bigotry, social injustice, and inequities in our research and health care system most broadly, which includes important and longstanding issues addressed by the Black Lives Matter movement, as well as long-neglected issues in Native children; ethnicity; religion; lesbian, gay, bisexual, and transgender rights; and ongoing problems related to immigrant families, especially those seeking asylum in our country.

THE AMERICAN PEDIATRIC SOCIETY (APS) ISSUE OF THE YEAR

In addition to our individual commitments to address issues of racism and social injustice especially as related to child health outcomes, there is a clear need to develop rigorous approaches linking key medical and non-medical groups and institutions to develop impactful strategies and action plans.[1–7] The APS is committed to improving the short- and long-term health and well-being of children by providing a forum to promote effective strategies to enhance research, education, training, and advocacy in pediatric academic medicine throughout North America. As part of its approach toward developing strategic plans to address key issues in pediatric academic medicine, the APS selects a major theme to target each year through selection of its "Issue of the Year." While recognizing that major problems cannot be readily solved in 1 year, identification of an issue of the year provides a focus that will launch a series of approaches including developing greater awareness of the problem and related issues, stimulating work toward developing greater mechanistic insights underlying the basis for and nature of the problem, and developing strategic action plans for interventions and further investigation.

In recognition of its critical importance, the APS has targeted "Racism and social injustice as determinants of child health" as the APS Issue of the Year. In addressing the "issue of the year," the APS is particularly aware of the unique opportunities for pediatricians, especially from within academic medical centers, to leverage the skills of the APS as a group to have a long-lasting impact. The APS fully espouses and supports efforts to develop innovative strategies to challenge racism and social injustice, just as readily as we support the highest values underlying research, education, and training in our medical centers. We further support action to identify and eliminate the institutionalized racism that has held back our ability to achieve the highly valued goals and missions that we embrace. We also support actions to recognize and remove unconscious bias while aiming for full inclusion and engagement of all individuals in our diverse culture.

As an initial step, the APS recently published a joint statement with the Society for Pediatric Research (SPR) to express the commitment of these societies to address issues of racism and social injustice.[15] Clearly, a major responsibility of the APS must be to particularly address racism and social injustice in collaboration

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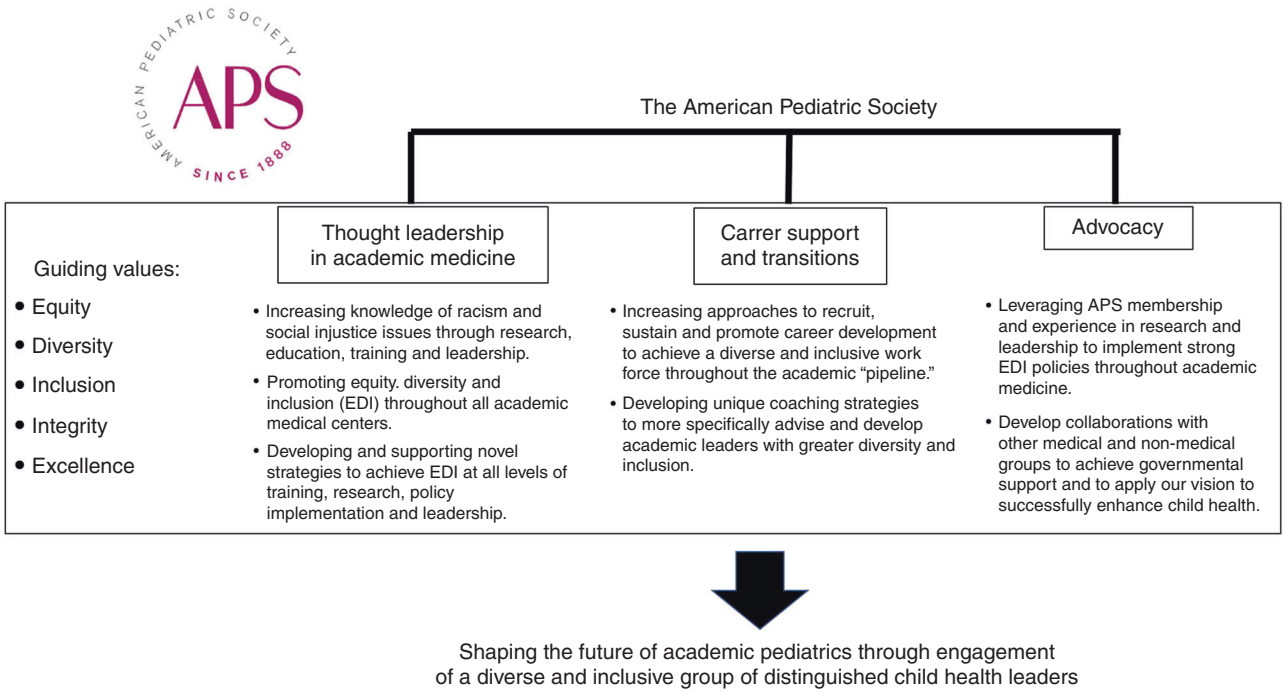

Fig. 1 The American Pediatric Society Missions, Values and Goals for Addressing the "Issue of the Year- Racism and Social Injustice as Determinants of Child Health".

with other groups, but the APS can especially tackle issues related to the APS' major leadership role in academic pediatrics that are clearly major avenues of opportunity within the APS mandate. Thus it is particularly incumbent for the APS to act throughout the academic community to address these issues with regards to child health most broadly but especially to improve the education and training of medical professionals, ranging from students, residents, fellows, faculty, and staff at our medical centers; support expansive and multi-pronged research addressing these vital issues; explore research programs that strongly engage those underrepresented in medicine and research among its investigative team members to enhance their careers as academic leaders; and to promote the application of novel curricula design and other training approaches to increase awareness of social factors and improve the quality of care for our diverse patients and their families. We clearly must provide sponsorship and opportunity for underrepresented groups in medicine to achieve an increase in diversity within leadership. This will also create more representative role models to encourage young people from all stages of the "pipeline" to become engaged in careers in pediatric medicine. Using our roles as scientific investigators, academic leaders, advocates, and teachers, the APS membership is in a unique position to advocate for many changes to increase public awareness of these issues, to provide information on the scientific evidence and impact of our research, and to enable the implementation of novel strategies within our medical schools and institutions along these lines.

THE APS WILL ADDRESS RACISM AND SOCIAL INJUSTICE IN ACADEMIC MEDICINE AND CHILD HEALTH

Planning is currently underway to target these issues, with action plans that target both "inward" actions within the APS organization as well as "outward" goals. First, in partnership with the SPR, the APS has published a clear statement that expresses our societies' views to work toward combating racism and social injustice through missions of advocacy, research, education, training, and community engagement most broadly.[15] Second, we must "clean our own house," including applying the very values of promoting diversity, inclusion, and antiracism within our own organization. To address changes in the APS that best reflect these values and long-term goals, changes are underway for revision of the APS mission and vision statements, as well as updating our nomination process and other by-laws (Fig. 1).

Promoting diversity, inclusion, and engagement within the Society is important to model our values and achieve our goals more successfully. Changes in the nomination process for APS membership, with continued expectations for high standards of achievement, will include more pro-active identification of potential members with diverse backgrounds; impactful contributions in research, advocacy, and leadership; and playing an active role in developing novel strategies in health care practices and delivery, training, medical education, and social engagement, especially as related to issues of racism and social injustice. We have recognized that, within the APS, we must strive for greater inclusion of African American, Latinx, Native Americans, and women who are underrepresented in membership and leadership to best represent and support the best of academic pediatrics and its multiple missions.[16,17] The APS and academic medicine more broadly are enriched by leaders from a diversity of racial, gender, and ethnic backgrounds and applying primary interests in specific academic themes, issues, and skill sets, ranging from advocacy to broad research areas, including patient- and laboratory- and population-based sciences. While Pediatrics has made inroads in increasing gender representation in the field, the same has not occurred for many underrepresented ethnic groups. Bringing this talented and diverse group together provides a potent voice to tackle many child health issues in a multi-pronged and comprehensive fashion. While being inclusive and seeking to achieve goals of antiracism and social justice, we must further be mindful that these responsibilities and specific tasks for meaningful actions should be a balanced workload from all. As academic leaders, we should all become the role models and exemplify our values through our own personal actions, especially as they extend into our roles at our own departments, medical centers, and communities.

We further plan to use the APS' influence and scientific credibility to drive evidence-based discussions of the harmful effects of social marginalization and racism on public health. Evidence clearly shows that racism is a public health issue and is a pediatric issue. Exposure to racism early in life has life-long impacts, biological and otherwise. APS must become more external facing and use its voice as distinguished academic pediatric leaders to impact broader societal discussions and policies about racism, diversity, and inclusion. The APS has both opportunity and obligation to work to educate and move people to action, especially in partnership with other outstanding forward-thinking pediatric groups as the American Academy of Pediatrics, SPR, and many others.

APS should speak out on the importance of addressing diversity, inclusion, and engagement challenges throughout all stages of the pipeline. For early and late career stages, recognizing, mediating, and supporting diversity and inclusion will help to keep academic pediatrics strong, and this is core to the APS mission. These issues are planned for further presentations and discussions through virtual forums, such as the Joint APS/SPR Virtual Chat series and an anticipated APS Town Hall Virtual Forum on Racism and Social Injustice, followed by other seminars to highlight several specific issues regarding the impact of racism on child and life-long health and the high perinatal morbidity and mortality rates.

SUMMARY

From these extraordinary challenges come opportunities to aggressively address both short- and long-term issues of racism and social injustice, as Black Lives Matter has been a vital "wake-up call" to those who have not previously taken action, including those involved with child health. As pediatricians and leaders of academic medicine, the APS has a particular opportunity and mandate to leverage its strengths to work toward creating healthier and more just society.

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AUTHOR CONTRIBUTIONS

Each of the authors contributed to the concepts and content in the manuscript and helped with the writing and final production of the manuscript.

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Pediatric RESEARCH

COMMENT

"Holistic Promotion of Scholarship and Advancement" APS racism series: at the intersection of equity, science, and social justice

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As academic pediatricians, unique opportunities exist within departments, medical centers, and universities to renew institutional values and commitments, forge new policies, and translate changes in education, training, research, and advocacy that will have sustained impact in combating the adverse effects of racism and inequities on the health of our children and their families.[1–6] Racism, inequities in diversity and inclusion, and social injustice have had horrific effects throughout all aspects of society, but especially regarding many short- and long-term health issues, ranging across the full gamut of life course, from perinatal and birth events to early death and higher rates of many morbidities in adulthood.[7–11] Along with personal and individual commitments of well-intentioned physicians and health providers throughout medicine, successful change must thoroughly involve academic institutions, medical societies, and health departments, which have particular responsibilities to commit to disrupting this cycle through the development and application of various strategies to address these issues at multiple levels.[12–18] The academic community seeks to address racism, inequity, lack of diversity, and issues with inclusion that impact child health, but must first recognize and act on its own issues of implicit bias. Every academic institution and related national and international organizations must first address and develop into systems that embody the highest values of antiracism, equity, and inclusion. Such efforts require self-examination and greater awareness of the many manifestations of institutional bias and addressing these issues with honesty, transparency, and a great sense of purpose within each organization.

Overall, there is a clear challenge to our medical institutions to address these issues, especially within pediatric medicine, even beyond the traditional borders of childhood disease, through the promotion of effective strategies to enhance research, education, training, and advocacy throughout the educational and professional pipeline. This pipeline involves all stages of career development, from early school-age exposures to encourage the sense of possibility for having careers in medicine and related scientific fields, to provide guidance throughout the educational system, and finally, to support the retention and promotion of under-represented faculty in diverse leadership roles throughout academic medicine. The overall mission of academic centers must be to more fully develop and implement innovative strategies to recognize and remove unconscious or implicit bias while aiming for full inclusion and engagement of individuals throughout all aspects of clinical care, research, education, and training in our medical centers.

Providing a more diverse workforce is of the utmost importance for achieving greater outcomes in child health, and it is very clear that diversity further improves and benefits achievement within each team and makes each organization better as well. In addition to patient care and management, focused efforts are needed to improve the education, training, and career support of all medical professionals, ranging from students, residents, fellows, and faculty from all race and ethnic backgrounds. Steps to achieve workforce diversity must begin with more successful approaches to strengthening the early pipeline. Supporting educational opportunities and developing ties between academic centers with local and national programs for young students will provide greater exposure of under-represented youth to science and provide a greater sense of feasibility and early commitment to a career in medicine and health-related sciences. Developing novel educational and research programs for high school students to increase interactions and opportunities at each academic medical center will provide foundational experiences to encourage medical careers. The importance of key role models who provide the mentorship, advice, and support even at this early stage cannot be over-emphasized. As such, identifying key role models and educators from the entire academic community that include faculty from diverse backgrounds is important, as this is a shared responsibility, which is not exclusive to under-represented faculty alone and will help to generalize strategies and teaching across races and ethnicities and directly speaks to shared goals throughout the institution.

Promoting the application of novel curricula design in medical student education to increase awareness of social factors and improve the quality of care for our diverse patients and their families is essential. Medical education is undergoing re-evaluation with anticipated revision of its curriculum to better integrate basic science with social determinants to better understand disease and outcomes as well as hospital care with a greater sense of community issues. Such experiences will provide an earlier and more consistent understanding of how social determinants affect health and disease beyond the structure of training programs in the past and an essential foundation throughout each student's career, regardless of subsequent specialty or practice setting. Such exposures should better inform practitioners of the future to understand and deliver more equitable and effective health care. Commitment to removing bias from the selection process for residency and fellowship training is critical to further support these goals.

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It is of further importance to explore research programs that strongly engage under-represented students in medicine and research among its investigative team members to enhance their careers as academic leaders. Despite many efforts and ongoing emphasis by the NIH, diversity among the NIH-funded biomedical workforce remains low. New approaches for achieving sustainable academic success in under-represented faculty have been recently described, including a novel program that promotes development of research skills and career advancement as exemplified by the Research in Academic Pediatrics Initiative on Diversity (RAPID) program.[15] In addition, the implementation of programs to increase "culturally aware" mentorship training with inclusion of both mentors and mentees provides another example of a successful strategy towards improving diversity in our academic centers.[16] We should further foster and help fellows and faculty apply for NIH research supplements that promote diversity, pay special attention to junior URM faculty, and help guide them through milestones to become successful senior faculty and leaders of academic programs, departments, and health care institutions.

As disparities in leadership at academic medical centers persist, better approaches are needed to increase opportunities and promote under-represented faculty to more leadership roles throughout our institutions. Academic medicine is enriched by leaders from a diversity of racial, gender, and ethnic backgrounds, and applying primary interests in specific academic themes, issues, and skill sets, ranging from advocacy to broad research areas, including patient-, laboratory-, and population-based sciences. One should assume that all students are potential candidates for leaders in academic medicine at multiple levels, from clinical care, research, education, hospital management and administration, and university wide leadership.

Thus, academic medicine must have a vigorous response to meet the long-neglected challenges to aggressively address racism, implicit bias, and social injustice as determinants of child health. Promoting successful careers to address these challenges require multipronged strategies at all stages of the academic pipeline, but especially to develop the new leadership that is required to successfully achieve goals of equity and inclusion. As pediatricians and leaders of academic medicine, medical schools, universities, and related societies have many opportunities to address critical responsibilities to drive progress forward for strengthening a diverse workforce to meet these challenges of equity, diversity, and inclusion, and ultimately improve the health outcomes of our children and their families.

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Pediatric RESEARCH

COMMENT

"Organizational solutions: calling the question" APS racism series: at the intersection of equity, science, and social justice

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Racism manifests in several forms—internalized, interpersonal, subversive, and institutionalized among them. The constructs that define and guide the various professional membership and honorific societies that constitute organized medicine in this country are not immune from harboring any, if not all, of these expressions of discrimination. Addressing structural bias and inequity at the organizational level requires authenticity, committed leadership, and transparent acknowledgement of transgressions both past and present. This commentary touches upon what "calling the question" must look like.

TRUTH, RECKONING, AND RECONCILIATION

Protests against social injustice, initially dominated by African Americans, have evolved and now encompass a multigenerational mosaic. Although many of the demands are directed at our governing institutions, there is a growing resolve to expunge racism from all of our institutions of power, including our academic health centers. This is to be expected because health care systems, including academic medical centers, are microcosms of society, and there is a growing realization that they have both been complicit and have the capacity to address the shameful health inequities that persist in our country.[1] The blame and expectation are justified. There are many examples of bias and discrimination in the history of academic medicine. At the same time, they are tremendously influential and can control the narrative that informs the practice of medicine, as well as refocus the training of physicians on the social aspects, as well as the biology of medicine. Slavery is largely responsible for a legacy of racism and injustice that directly affects medicine, as well as other social institutions.[2] Recognizing the harm to patients that results from discrimination and racism, addressing racial injustice, and shielding vulnerable patients from harm better informs the meaning of "equitable" among the accepted components of health care quality.

Most physicians are committed to treating all patients "equally," but they operate in an inherently racist system that leads to disparate rates of premature dying and variable levels of health and well-being. Physicians also have the "power, privilege, and responsibility" for dismantling this system.[3] This starts with learning about, understanding, and, most importantly, acknowledging and reconciling the racist doctrines that justified the oppression of African Americans for economic and political exploitation.[4] It includes understanding that there is little evidence to suggest that differences between races are intrinsic, inherited, or biologic. It means defining and naming racism. It also means shifting the focus of care providers, educators, and researchers from a majority, entitled group perspective to one focused on marginalized and historically disenfranchised groups. It means explicitly calling the question.

LEADERSHIP AUTHENTICITY

Leadership authenticity at the intersection of equity, science, and social justice requires academic leaders to: (1) embrace social justice engagement principles that involve active listening; (2) create safe spaces for crucial conversations about race and racism; (3) apply collective participatory strategies that involve defining and deciding on the nature of issues of systemic oppressions and their solutions; (4) explore unconscious biases; and (5) recognize and honor cross-cultural communication differences.[5] Health professions schools, graduate medical education training programs, and their leaders should ensure a commitment to inclusion, justice, and equity among their students, faculty, staff, and administration and demonstrate authentic acceptance of individuals from diverse backgrounds. Leadership authenticity and integrity begins with a commitment to personal accountability and the willingness and fortitude to instigate necessary, if not disruptive change. Evidence demonstrates that implicit bias and the persistence of systemic racism in our workplace, lives, and actions negatively impact the advancement of science and exacerbate inequities and injustice.

DISRUPTIVE INSTITUTIONAL AND PUBLIC POLICY

Effective change requires a focus on correcting institutional and public policies that perpetuate discriminatory realities. "Business as usual" can no longer be accepted in health care institutions. Every day, physicians, staff, and consumers of color call for commitment to action, not satisfied with vague acknowledgments and limited results. Because diversity initiatives have not achieved their desired endpoints, academic leaders have largely not benefited from the wealth of perspectives that inform strategic and programmatic direction. Further, diversity and inclusion tools and practices have not sufficed in addressing racial inequities. Effecting change has largely focused on

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guidelines, practice, and programs that have been retrofit onto existing structures with a goal of identifying physicians and employees who are better "fits." These approaches fail to address the underlying culture. Rather, there is a need to change culture and transform our health care organizations to fit all people. Disruptive intervention is necessary, involving concerted commitment of time and resources to individual learning and understanding about our racial history and biases. Humility, empathy, and respect are required; becoming comfortable with conflict is necessary for transformation to occur and be sustained.[6] Leaders, to be effective, must effectively communicate why equity actions are important, align bias and discrimination work with core missions, invite honest feedback by people of color, address hiring and retention of a diverse workforce, and personally commit to change.[7] Institutional action must be accompanied by advocacy for public policies that support these objectives. Dreyer et al., in a recent commentary, provide an example of this in a call for a suite of evidence-based policy changes to address police violence.[8]

ROLE OF PROFESSIONAL SOCIETIES AS LEADERS IN ANTI-RACISM

Professional societies and leaders involved in clinical care delivery and health profession training and education must acknowledge the deleterious effects of racism on health and well-being; take strong positions against discriminatory policies, practices, and events; and take action to promote safe and affirmative environments where all individuals thrive. By acknowledging the role of racism in child and adolescent health, pediatricians and their professional societies will be able to proactively engage in strategies to optimize clinical care, workforce development, professional education, systems engagement, and research in a manner designed to reduce the health effects of structural, personally mediated, and internalized racism.[9] This is consistent with founding director of the Boston University Center for Antiracist Research, Ibram Kendi's transformative concept of antiracism, which suggests the only way to undo racism is to consistently identify it, describe it, and dismantle it.[10] This also means identifying racism in our professional societies, institutions, and practices.

In additionally, our professional societies must assert a leadership role in addressing issues of the pipeline development for a more equitable and diverse pediatric workforce. The educational and developmental process that ultimately results in the training of either a general or subspecialty practitioner begins early in childhood.[11] In addition to working for change in social and educational policies, our efforts must include the development and fostering of long-term national programs to support, encourage, and mentor children from racial and ethnic backgrounds underrepresented in medicine. Such efforts will have the most indelible impact on transforming the status quo in medicine, *writ large*, and pediatrics in particular.

AUTHOR CONTRIBUTIONS

D.M.P., J.L.W., and L.R.W.-H. conceptualized the manuscript; J.L.W. developed the outline and content areas; all authors contributed content to the manuscript; D.M.P., J.L.W., and L.R.W.-H. reviewed and revised the manuscript; and all authors reviewed and approved the revised manuscript as submitted and agreed to be accountable for all aspects of the work.

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Pediatric RESEARCH

COMMENT

"Racism as a public health issue" APS racism series: at the intersection of equity, science, and social justice

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RACISM AS A PUBLIC HEALTH ISSUE

The social unrest of the past several months highlights the importance of ensuring that science and fact-based objectivity align with the public discourse. A deepening body of literature makes clear the historical association of bias, discrimination, and injustice on Black, indigenous, and people of color (BIPOC) and the deleterious impact experiences of racism can have on healthy child development. This commentary surfaces recent and rooted evidence defining racism as a public health issue.

THE BIOLOGICAL EFFECTS OF CHRONIC AND REPETITIVE STRESS

Among the ineluctable effects of racism are poverty and social marginalization. There has been a longstanding interest in the potential link between the chronic stress that accompanies poverty and marginalization and the poor health outcomes observed in populations that have been most subject to racism.[1] Only now, with advances in cell biology and epigenetics, have we begun to understand the underlying biology through which stress contributes to these outcomes.[2] A detailed review of this subject in not within the scope of this commentary; however, two recent examples from the literature are illustrative of the underlying biologic stressors that add support to the idea that racism is, in fact, a public health problem. Hong and colleagues investigated the effects of in utero stress on the adult immune system in an animal model.[3] Prenatal stress was predictably associated with disruption of the hypothalamic–pituitary axis but more surprising was the effect on the immune system. These authors observed reduced survival and function in CD8+ T cells, a population of cells that is important in combatting viral and bacterial infections and also in suppressing tumors and autoimmunity. The reduced function of CD8+ T cells was mediated epigenetically, as demonstrated in chromatin accessibility experiments. In another study, Dias et al. demonstrated that stress-induced epigenetic effects can be transmitted intergenerationally, even when the stress-producing stimulus is no longer present.[4] In this mouse model, the stress-inducing stimulus was preceded by a specific odor. The F1 generation of the stressed mice (that had not been exposed to either the odor or the stressful stimulus) demonstrated the same fear in response to the odor as did the F0 mice (i.e., those exposed to the odor and stress). Furthermore, the brains of the F1 mice demonstrated significant aberrations in the organization of the regions of the brain that regulate smell, as well as, altered DNA methylation of relevant genes. The F2 generation of these mice showed similar anatomy, behavior, and epigenetic changes. These two studies are illustrative of the degree to which we are beginning to understand the underlying biology of chronic stress, including the stresses that accompany racism and social marginalization. The Dias study in particular is a reminder that the biological effects of historically mediated trauma such as slavery and the forced removal of Native Americans may linger even in individuals who have seemingly escaped the more toxic environments to which their ancestors were exposed.

DISPARITIES ACROSS THE LIFE COURSE

Health, sickness, and access to affordable and high-quality health care are not equally distributed in our country. The root causes of these differences are often attributed to structural and social factors that are commonly referred to as the social determinants of health. Differences in access to resources such as wealth and income, employment, housing, safe neighborhoods, education, and nutritious food significantly contribute to disparity development and overall wellness. For BIPOC, such differential access is almost always a result of racially discriminatory practices. These practices are sometimes overt but often are so woven into the fabric of our society as to seem invisible to those not willing to acknowledge that our country has been built on the historical and cumulative legacy of physical, emotional, and social trauma caused by racism. This is what sociologist, historian, and activist W.E.B. Du Bois was referring to when he wrote, "The problem of the twentieth century is the problem of the color line."[5] Now, 20 years into the twenty-first century, we note that this line has not changed, and we are now just beginning to acknowledge that the health disparities that clinicians and researchers have documented for well over 100 years are primarily a result of systemic, transpersonal, and internalized racism.[6]

How has this trauma manifest? BIPOC children have higher rates of asthma, obesity, infant mortality, low birth weight, prematurity, poor oral health, special health care needs, adolescent acquired immunodeficiency syndrome, and overall reported poor health status.[7] Many of these conditions can be directly related to the social determinant noted above, which have root causes in historical and systemic racism. Prematurity, low birthweight, and

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infant mortality in particular highlight the intergenerational effects of toxic stressors such as racism and elucidate the epigenetic-driven physiologic "weathering" experienced by BIPOC children and adolescents across the life course.[8] Higher incidence of behavioral and mental health diagnoses among children from certain BIPOC groups can also be attributed to the mechanisms discussed above or by implicit (or explicit) diagnostic bias. Reviews of the literature on the effects of racism on children's health have shown positive associations between childhood exposure to racism and depression, anxiety, self-esteem, internalizing and externalizing behaviors, and alcohol and tobacco use.[9] For the adults that these children become, the scars deepen and broaden. Adding to the list of health disparities, adults from the BIPOC groups have higher incidence of cardiovascular disease and hypertension, stroke, chronic kidney disease, diabetes, and certain cancers (e.g., indigenous Americans have the highest rate of liver and intrahepatic bile duct cancer). The origins of many of these chronic diseases certainly begin in childhood. As per the allostatic load mechanism, psychosocial stressors such as racism get under the skin to disrupt normal physiology, and over many years this dysregulation results in chronic disease. A second mechanism that associates racism to poor health is John Henryism—high effort coping strategies needed to counteract the burdens of racism, which has been associated with higher rates of hypertension and depression in Blacks.[10,11]

From a life course perspective, evidence suggests that exposure to racism—implicitly and explicitly—results in poor health outcomes and disparities from the intergenerational prenatal period (prematurity and low birthweight) to childhood and adolescence (behavioral and mental health conditions) on to adulthood (chronic health conditions).

THE IMPACT OF INEQUITY IN CARE PROVISION

Racial disparities in the clinical provision of care has been broadly recognized across organized medicine.[12–15] Inequities in multiple clinical settings ranging from primary care access to management of closed head injury to prescription of opioid analgesia have all been well documented.[16–18] Over the past 5 years, a series of cross-sectional analyses of large national datasets and retrospective studies leveraging the Pediatric Emergency Care Applied Research Network (PECARN) registry have contributed significant specificity and much needed verification of the impact of disparate care delivery on children of color.

In two separate studies, Goyal and colleagues examined analgesia administration for pediatric patients presenting to the emergency department for acute appendicitis and long bone fractures, respectively.[19,20] Each analysis revealed that African American children received opioid analgesia significantly less frequently than white patients and were less likely to achieve optimal pain reduction. A methodologically similar PECARN registry analysis of treatment for viral acute respiratory tract infection (ARTI) found that white children were more likely to receive antibiotics for viral ARTI than African American or Hispanic children.[21] In a large, single-center study assessing racial differences in sepsis recognition utilizing a standardized clinical alert pathway, white children were found more likely to be treated for sepsis than African American children.[22]

These studies contribute to the growing implication of latent biases exercised by pediatric health care providers. Using the validated implicit-association test (IAT), Johnson and colleagues documented strong unconscious bias against African American children by providers in a single-center study.[23] A meta-analysis of the IAT in the healthcare setting revealed a paucity of published literature definitively aligning latent or implicit bias with deleterious clinical outcomes.[24] However, one can intuitively argue that oligoanalgesia in a child in pain and antibiotic over-prescription in the face of burgeoning multiple drug-resistant organisms compromise patient safety and certainly represent adverse individual health and public health consequences. The pediatric academic community must continue to direct scholarly attention to the examination of the root causes of race and ethnicity-associated practice discrepancies and clinical guideline deviations.[25] Mitigating harm and defining provider-directed interventions are vitally important. Further, structural support at the institutional level for investigators engaged in this work, many of whom are early career, underrepresented in medicine academicians, is warranted and necessary in order to advance this work.

THE CASE FOR RACIAL SOCIALIZATION OF CHILDREN

Children represent the most rapidly diversifying segment of the population in the United States (US). In fact, non-Hispanic white (NHW) children already constitute <50% of the pediatric population, and by 2045, it is projected that, collectively, people of color will eclipse NHWs across the entirety of the US demographic.[26] As such, it is critical for parents, pediatricians, and all who impact the lives of children to embrace the importance of racial socialization as a foundational construct on the path to healthy human development. Further, open, transparent discussion about the historic and current realities of race in America can no longer be hidden or be the "third rail" of social discourse to be avoided. Rather diversity, inclusion, and belonging must be celebrated with an authentic intentionality rooted in truth and acknowledgement not only for the benefit of all children and their families but also the institutions that support them.

What is racial socialization? Broadly speaking, racial socialization refers to the process by which children learn to navigate race issues.[27] Studied for decades in the social science literature, and notably grounded in the seminal doll experiments of trailblazing African American psychologists Kenneth and Mamie Clark, racial socialization has primarily been explored as the work of parents of children of color to help their children navigate a racially biased world.[28,29] One well-studied racial socialization strategy, cultural pride reinforcement, helps children to learn and value their cultural heritage and has been associated with improved academic, behavioral, and mental health outcomes for children of all ages.[30] However, in order for pediatricians to successfully support children and families in contextualizing and operationalizing racial socialization as a part of longitudinal care, it is incumbent on all of us to learn, educate, and become facile in the fundamental tenets of race relations in this country. This is not a trivial task and will require proactive engagement by all facets of the pediatric community especially in the development and evaluation of tools and evidence-based approaches that can mitigate the impact of exposure to racist behaviors.[31]

POLICE VIOLENCE AND COMMUNITIES OF COLOR

The murder of George Floyd at the knee of a police officer is the most recent tragic example of what parents of BIPOC children fear on a daily basis—that their child will be in a situation where their life depends on a reflexive millisecond decision of an adult who is trained to act on the most negative assessment of a situation. Tamir Rice (age 12 years), Michael Brown (age 18 years), Janisha Fonville (age 20 years), Stephon Clark (age 22 years), Gabriella Nevarez (age 22 years)—these are but a few of the more highly publicized cases of adolescents and young adults who have been slain by police in their homes, in their cars, holding a toy gun, holding a cellphone, or otherwise performing acts of daily living while being a young person of color.

These tragic incidences are the tip of the iceberg. Many African Americans can tell stories of "DWB" (Driving While Black), "SWB" (Shopping While Black), or otherwise being harassed or profiled on the basis of being Black.[32] These situations happen to children as

well. In a sample of 277 Black, Latinx, and multicultural children 8–18 years of age, 54% responded that they had been followed by a security guard at a store, and 34% reported being unfairly treated by a police officer.[33] How are these stressful experiences embedded into the developing minds of our children?

Police violence should not be seen in isolation but as one expression of societal norms that implicitly devalue and adversely impact the lives and well-being of BIPOC.[34,35] Taken within the context of economic redlining, educational inequities, racialized employment and salary disparities, and other instances of general violence, the pattern becomes evident. Unequal treatment from law enforcement should be seen as one symptom of the underlying pathology of systemic racism.

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J.L.W. and L.R.W.-H. conceptualized the manuscript; J.L.W. developed the outline and content areas; all authors contributed content to the manuscript; J.L.W. and L.R.W.-H. reviewed and revised the manuscript; and all authors reviewed and approved the revised manuscript as submitted and agreed to be accountable for all aspects of the work.

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