ANTI-RACISM IN DENTAL PUBLIC HEALTH: A CALL TO ACTION

AMERICAN ASSOCIATION OF PUBLIC HEALTH DENTISTRY



"Silence about and lack of attention and consideration for anti-racism advocacy by oral health proponents supports racism and its acidic effects. If dental public health advocates fail to speak out and provide leadership regarding anti-racism, what other entity in oral health domain will? If not us, who? If not now, when?"

- Dr. Caswell Evans

Introduction

Racism is a public health and dental public health crisis. The aim of this white paper is to help address a need within the dental public health community for deeper understanding of structural racism as a source of oral health inequities. Beyond raising awareness and better understanding racism's role in oral health inequities, it is critically important to identify actions that the dental public health community can take to reduce and eliminate racism.

Like others in the public health community and beyond, members of the American Association of Public Health Dentistry (AAPHD) were shaken by the events of 2020. These included: the arrival of the COVID-19 pandemic, our nation's inadequate response to it, and the increased attention to the profound racial discrimination and inequities that exist in this country as brought to light by the tragic killings of George Floyd, Brianna Taylor, and so many others. From the early days of the pandemic, it was clear that there were racial inequities in morbidity and mortality of the COVID-19 disease.^{2,3} George Floyd's death further amplified public awareness of these inequities, and the resulting protests in support of racial justice increased public consciousness that discrimination and racism were rampant in American society.

2020 also saw a sharp rise in hate crimes, particularly against Asian-Americans, who were often scapegoated for the fallout resulting from the pandemic. These abhorrent acts of violence stoked fear and terror throughout the Asian diaspora, stripping a sense of belonging from a community which has repeatedly been propped up as a "model minority" — a myth that erases their individuality and suffering, and otherwise serves only to divide people of color. A national moment requiring collective unity and strength was met instead with tribalism and divisiveness.

The racism that contributes to the inequities of the pandemic and to George Floyd's death also impact oral health. The dental public health community is well aware of these inequities. ^{4,5} Although the public and other health professions may not know the statistics describing these oral health disparities, because of structural racism they parallel disparities in other health outcomes and areas of life. ⁶ Black and brown communities bear a disproportionate burden of these disparities. ⁷

This white paper is a call to action for dental public health to take anti-racist steps. To be anti-racist is to fight against racism. According to Dr. Ibram Kendi, "To be antiracist is a radical choice in the face of history, requiring a radical reorientation of our consciousness." In practice, this means addressing racism at all levels, and specifically for dental public health it starts with understanding how racism impacts health, science, education, policy, and practice.

In response to a need to examine critically the role of racism and identify anti-racist actions in dental public health, the AAPHD Councils and Board of Directors have collaboratively developed this white paper. This paper summarizes the state of current knowledge regarding the role of racism and antiracist actions in each area of the four AAPHD Councils – Scientific Information, Educational Affairs, Policy and Advocacy, and Practice – and provides action steps to advance anti-racist practices in dental public health. These action steps aim to provide a framework and foundation upon which to push forward the work within the dental public health community to achieve a more equitable and inclusive society. AAPHD is committed to leading and supporting efforts to do this work.

Racism and health

Health in the United States is aligned strongly along racial and socioeconomic lines, suggesting links between hierarchies of social advantage and health. Understanding the relationship between racism and health is needed to address racial inequities in oral health. In the United States, Black, American Indian/Alaska Native, and Latinx populations have poorer health and experience poorer quality of care.9 Evidence has revealed that the differences in healthcare experiences and health outcomes between White individuals and historically marginalized racial groups do not stem largely from biological factors, but rather are associated with social factors for which race serves as a proxy. 10 The etiological factor for health inequities is not race, but racism.¹¹

Racism can occur at many levels. Dr. Camara Jones – a leading epidemiologist, physician, scholar, and activist in anti-racism – presented a theoretical framework for understanding racism at three levels: personally-mediated, internalized, and institutional. 10,12 Personally-mediated racism is defined as intentional or unintentional prejudice and discrimination, and typically manifests as lack of respect, suspicion, devaluation, scapegoating, and dehumanization. 12 This is what most people think of as racism. Internalized racism is defined as the acceptance of negative societal beliefs and stereotypes about oneself, which can lead to the perception of oneself as worthless and powerless. 13 Institutional racism, sometimes referred to as structural racism or systemic racism, can be described as differential access to services, opportunities, information, and resources, and manifests in material conditions and access to power. 12 While all three forms of racism can impact emotional and physical health, institutional racism is the most fundamental and impacts social determinants of health by allowing systems to perpetuate injustices that have deep historic origins.14

Racism affects health, and manifests in inequities in morbidity and mortality. For example, Black individuals are more likely to develop age-related diseases earlier than White individuals, ¹⁵ and this disproportionate early morbidity and mortality is linked to prolonged exposure to chronic societal and political racialized practices such as discrimination, racism, and segregation. ¹⁶⁻¹⁹ The cumulative impact is that people of color, on average, have a life expectancy that is seven years shorter than White people. ¹⁹ These racial differences in life expectancy occur at all levels of education or income; for example, Black Americans with high income have a lower life expectancy than White Americans with high income. ²⁰

Acknowledging how racism impacts health and society, the following sections describe how racism impacts science, education, policy, and practice within dental public health. Each section describes the problem of racism and proposed specific and feasible action steps that AAPHD, its members, and dental public health practitioners can take to engage in anti-racist solutions. While these sections have been thoughtfully composed, they do not reflect the totality of possible action steps, but offer a starting point from which to engage. AAPHD's esteemed member, Dr. Caswell Evans, closes the paper with a call to action commentary from the perspective of a career leader and advocate in dental public health. The authors of this paper invite readers to join in this work to realize the discipline of dental public health as an inclusive space and to engage in actions steps that both improve population health and promote the liberation of communities that have been subjected to racism for far too long.

"The etiological factor for health inequities is not race, but racism."

WC Jenkins

ANTI-RACISM IN DENTAL PUBLIC HEALTH SCIENCE

Authored by the AAPHD Council on Scientific Information

Introduction

The state of the science with regard to the impact of racism on oral health has focused primarily on describing racial inequities in oral disease burden and access to care. At this time, there is a paucity of research on the impact of racism on oral health. For that reason, this section summarizes known racial inequities in oral disease and access, and offers broader context and next steps for researchers to consider in studying the various levels of racism as determinants of oral health. Racial inequities in oral health are downstream outcomes of inequities in social determinants of health, such as wealth, education, social status, and minority status.²¹

Racial inequities in oral health

National surveillance data have consistently revealed racial inequities in oral health status and access to oral health care across the age spectrum. Among children, for example, Black and Mexican American children have higher prevalence of caries experience, and higher rates of untreated caries, than White children.²² Among adults, while Black and Mexican Americans have been found to have lower caries experience than White adults, they had higher prevalence of untreated caries. Black older adults age 65+ were twice as likely as White older adults to be edentulous,²² and Black older adults had 2.7 increased odds of potential chewing difficulty compared to White older adults.²³ Black and Mexican Americans were significantly more likely to have periodontitis as well, with severe periodontitis twice as common among both racial minority groups compared to White people.²⁴ Significant health inequities are also observed in oral cancer; Black populations not only had a significantly higher proportion of tongue cancers than White populations (70% vs 53%) but, more critically, were also more likely to be found in a more advanced

stage (59% vs 44%).^{25,26} Further, Black men had significantly lower 5-year oral cancer survival rates than White men.²⁵

Racial inequities also exist in access to oral health care. Dental insurance is an important predictor of access to oral health. Among adults, Hispanic individuals have historically been less likely to have dental insurance compared to other racial groups. However, the disparity has decreased considerably in the last 20 years.²⁷ The Affordable Care Act significantly reduced racial inequities in overall health insurance coverage for adults, though inequities still exist.²⁸ Among children, in 2007 U.S.born minority children were more likely to have dental insurance than U.S.-born White children; however, Hispanic children born outside the U.S. were more likely to be uninsured.²⁹ In contrast, as of 2018-2019 White children (5.1%) were less likely than Hispanic (9.6%) or Black (7.4%) children to be medically uninsured.30

Dental care utilization is also lower among Black and Hispanic individuals compared to White individuals. 31,32 Among Medicaid enrollees, minority groups are more likely to have longer intervals between dental visits.³³ Care avoidance may be driven, in part, by provider mistrust among minorities and migrant workers, and feeling a lack of respect from providers and staff. 34,35 Notably, from 2013-2018 there was a reduction in dental utilization inequities among children and, to a lesser degree, nonelderly adults.³⁶ However, racial disparities in dental care use persist among older adults; in 2017, White elders were significantly more likely to have a recent dental visit compared to Hispanic, Black, and Asian elders (69% vs. 55%, 53%, and 53%, respectively).³⁷

Call to study racism in oral health

For many minority groups, especially Black populations, a tumultuous history of abuse by researchers at academic institutions and within the national government have led to mistrust and skepticism for medical professionals and research. 34,38 This mistrust serves as a barrier preventing populations from participating in studies and benefiting from results.³⁹ To help address these barriers, evidence suggests that homophily, or the tendency to seek care with people who are similar to themselves, may be one strategy for overcoming mistrust and reducing oral health inequities.³⁴ Outreach by the research community to improve research literacy – defined as the ability to understand and critically appraise scientific research - can increase engagement of minority populations in research, improve trust, and foster communityacademic research partnerships. 40-42

Research in oral health has extensively investigated inequities in oral disease burden and access to care, and often used socioeconomic status to explain differences between racial and ethnic groups, but there is very limited research on the impact of racism as a mechanism driving racial inequity in oral health.⁴³ To advance science and address racial inequities in oral health, researchers need to use

theories and conceptual tools that treat racism as part of an oppressive system with historical roots and dire consequences. 44,45 Given that racism occurs at multiple levels, researchers need to examine racism not only at the individual level but also at the structural level so as to improve health equity and bring sustainable change.

Various frameworks have been developed to examine racial inequities in health. 46-48 The National Institute on Minority Health and Health Disparities has proposed a multilevel-multidomain framework to address health disparities and promote health equity. 49,50 In addition to health determinants, the framework specifies that health outcomes also span multiple levels (individual, family and organizational, community, and population). This comprehensive framework recognizes both risk and resilience factors that may have a positive or negative impact on minority health or health disparities. It can be used as a tool to assess the state of current research and identify gaps and opportunities for future research.

Action items

The body of research on racism's impact on oral health is limited; studies generally treat race, which is a social construct, as a control factor without taking into account the potential mediating effects of racism. Omissions of racism stem, in part, from a lack of data on racism in national data sources. Inclusion of items on racism and discrimination in national health surveys would be one approach to help remedy this.

The following research agenda is offered to address gaps in knowledge that can help inform policies, programs, and interventions to address and prevent racism and racial inequities in oral health:

- Examine the long-term impact of racism on oral health and overall health.
- Examine the role of racism on racial inequities in access and quality of dental care.
- Study the impact of health literacy and research literacy on oral health inequity, and evaluate interventions to improve both forms of literacy as an approach to achieving equity.
- Engage in community-based, stakeholder-engaged research to create healthier communities and advance oral health equity.
- Investigate the causal impact of social injustice on oral health outcomes over the lifetime, including but not limited to discrimination, stereotyping, residential segregation, educational and income inequalities, imbalance in community-level assets and health care resources, and exposure to environmental toxins.
- Examine the role of mistrust on engagement with oral health providers and research, and investigate interventions to improve trust.
- Assess how institutional racism impacts development of a diverse oral health workforce, and develop strategies to overcome these barriers.
- Evaluate effective ways to translate and disseminate research findings beyond traditional academic mechanisms so that the results can have a direct impact on populations and communities impacted by racism.

"Research in oral health has extensively investigated inequities in oral disease burden and access to care, ... but there is very limited research on the impact of racism as a mechanism driving racial inequity in oral health."

S. Hines, et. al

ANTI-RACISM IN DENTAL PUBLIC HEALTH EDUCATION

Authored by the AAPHD Council on Educational Affairs

The state of the dental public health education with regard to the impact of racism has focused primarily on diversity. Based on current standards from the Commission on Dental Accreditation (CODA), dental schools must have policies and practices to: a) achieve appropriate levels of diversity among its students, faculty, and staff; b) engage in ongoing systematic and focused efforts to attract and retain students, faculty, and staff from diverse backgrounds; and c) systematically evaluate comprehensive strategies to improve the institutional climate for diversity (CODA Standard 1-4, 2019). 51 Schools can take a number of approaches to meet these ends. Cultural competency has been included in predoctoral curricula, and clinical experiences focus on delivering quality dental care to culturally diverse patients.

In the CODA standards for the Dental Public Health specialty, there is no clear standard related to teaching about diversity or focusing on racial equity in practice; however, there is a mention of expectation from graduates to respect the culture, diversity, beliefs, and values in the community. Graduates must receive instruction in, and be able to apply, the principles of ethical reasoning, ethical decision making, and professional responsibility as they pertain to the academic environment, research, patient care, practice management, and programs to promote the oral health of individuals and communities (CODA Standard 4-1, 2020).52 The intent is that graduates are expected to know how to draw on a range of resources such as professional codes, regulatory law, and ethical theories to guide judgment and action for issues that are complex, novel, ethically arguable, divisive, or of public concern. Additionally, there is a standard to integrate the social determinants of health into

dental public health practice (CODA Standard 4-5, 2020).⁵² Neither of these standards explicitly focuses on racism or calls for anti-racist training and practice in education.

While there is not a clear mention of systemic racism or anti-racism standards within the CODA document, the murders of George Floyd and Breonna Taylor and racial justice movements over the past year have necessitated the discussion of these issues in the curricula of education programs. To ensure dental students and postdoctoral students are competent in providing anti-racist and unbiased health care, there should be an incorporation of anti-racism standards in CODA's predoctoral and Dental Public Health Advanced Education Program standards.

Promoting historically underrepresented minorities in the United States in the dental workforce

Currently, there is considerably less racial diversity among U.S. dentists compared to the overall U.S. population.⁵³ Funding at the national level has helped develop programs to increase the recruitment of underrepresented minority students across all health disciplines. Recruitment can begin through pathway programs implemented in middle and high schools, community colleges, vocational schools or universities that traditionally have a higher enrollment of students from a disadvantaged background.⁵⁴

The Health Resources & Services Administration (HRSA) funds training programs for healthcare professionals. HRSA's Scholarships for Disadvantaged Students program promotes diversity among the health professions by providing awards

to eligible health professions schools. 55 This program funds schools to provide scholarships to students from disadvantaged backgrounds who have a demonstrated financial need and are enrolled fulltime in a health profession program. The Oral Health Training and Workforce Programs through HRSA include grants for state oral health workforce programs, faculty development, loan repayment, and both pre- and postdoctoral training programs. Advanced Education in General Dentistry, General Practice Residencies, Dental Public Health, and Pediatric Dentistry are the supported postdoctoral education programs in dentistry. 56 HRSA's postgraduate education (PGE) training grants are designed to enhance access to oral health services by increasing the number of oral health care providers working in underserved areas and improving training programs for oral health care providers. 56 Although these opportunities do not specifically target underrepresented minority applicants, an evaluation found that residents who were supported by a HRSA workforce grant were considerably more racially and ethnically diverse than residents of all PGE programs regardless of HRSA funding.⁵⁷

Another example strategy in academic settings is the recruitment and retention of diverse faculty. In 2020, the American Dental Education Association (ADEA) released a Faculty Diversity Toolkit to guide dental school efforts to recruit and retain diverse faculty. This toolkit provides numerous recommendations for the recruitment and interview processes, mentoring, professional development, and maintaining an inclusive climate.⁵⁸ The development of intentional recruitment strategies for students and faculty has proven to be effective in the recruitment and retention of a diverse workforce.⁵⁹ Schools should engage in ongoing systematic and focused efforts to attract and retain students, residents, faculty, and staff from diverse backgrounds.

Inclusion of oral health equity, social constructs of race, and physiological impacts of racism into dental curricula

CODA standards do not require curricula on critical race theory (i.e., race is a social construct, not biological) nor the physiological impacts of racism on health in predoctoral dental programs or the dental public health specialty. The CODA standards for predoctoral dental programs state that behavioral science content in the curriculum should include "factors and practices associated with disparities in health status among subpopulations, including but not limited to, racial, ethnic, geographic, or socioeconomic groups," but no such standard regarding oral health equity exists for the dental public health specialty.⁵²

Anecdotally, dental educators, specifically those in dental public health and behavioral science, are including critical race theory and the physiological impact of racism on health in their coursework. However, there is a lack of published evidence on the extent in which these topics are covered in dental education across the country. There is evidence that dental schools have integrated cultural competency training into their curricula in meaningful ways. 60 However, an essential component of providing culturally competent patient care to racially diverse populations is recognizing racial oral health inequities and acknowledging the role of racism in contributing to them. 61 A study from one dental school found that some dental students and educators harbor colorblind racial attitudes that deny or minimize the existence of racism, as well as a lack of awareness of discrimination and racial bias, with White students and male students having higher levels of these beliefs than female and underrepresented minority students. 61 Further, a study at another dental school found that 22 percent of dental students experienced discrimination, most often by classmates and clinic faculty. 62 This inequitable

treatment also extends to patient care. Patel et al. found that racial bias affects dentists' clinical decision making and influences the quality of care received by Black patients. ⁶³ These findings underscore the need to teach the concepts of racial inequities, racism, and implicit bias in dental curricula.

Action items

To support the inclusion of anti-racism practices in dental education, the AAPHD Council on Educational Affairs is committed to address the development of a sustainable pathway program as part of its goals and objectives. Strong leadership skills with a diverse dental public health workforce can be instrumental in the development and implementation of a sustainable pathway program.

In addition to work within the council, the following action items are offered to help address gaps in knowledge and identify advocacy priorities to advance anti-racist curricula and expanding diversity within dental education:

- Advocate for building and sustaining predoctoral dental program and dental public health program pathways to support historically underrepresented minorities in the specialty.
- Examine the degree to which racism affects predoctoral and postdoctoral dental residency admissions processes.
- Examine how resources can be leveraged to fund historically underrepresented minority faculty development.
- Examine the degree to which predoctoral dental programs and dental public health residency programs teach the topics of oral health equity, critical race theory, racism, and the physiologic impacts of racism.
- Advocate for CODA to incorporate anti-racism, social justice, and equity in dental public health curricula and residency standards.
- Advocate for implicit bias training and racial equity education for dental faculty, staff, and students, as well as AAPHD members and student chapters.
- Conduct additional research on:
 - Dental students' experiences with discrimination by classmates, faculty, leadership team and staff
 - Dental faculty experiences with discrimination by the students, peers, leadership team and staff.
 - Attitudes among dental faculty/educators related to racism and unconscious bias.

ANTI-RACISM IN DENTAL PUBLIC HEALTH POLICY AND ADVOCACY

Authored by the AAPHD Council on Policy and Advocacy

Policies have the power to lift up a population, or to tear a community down. Historical policies that allowed and even promoted racial discrimination (e.g., segregation, redlining) have rightly been abolished and condemned. The effects of these policies were not directly targeting health; however, they set in motion a long-lasting cycle of determinants that all but ensured continued racial inequities that affect health and will continue to do so if we as a society do not take deliberate, thoughtful, and collaborative action.

Structural racism built into policies—whether intentional or unintentional—affect community health, with some populations affected more than others. ⁶⁴ These upstream policies are key factors that affect all aspects of oral health from dental care access to treatment options in the dental chair, promoting or hindering optimal oral health function and quality of life.

As policy development is a core function of public health, 65 it can play a pivotal role in addressing the structural racism that contributes to poor health conditions. The "health in all policies" and scanning the policy development process and landscape with a "health lens analysis" have been promoted as approaches that can collaboratively ensure that nonhealth focused policies (e.g., education, transportation, environmental) are developed to maximize positive health outcomes. 65 Keys to the success of this approach are: 1) a collaborative methodology, including cross-sector collaboration and stakeholder engagement, and 2) promoting equity by addressing social determinants of health.⁶⁶ A "racial equity in all policies" mindset is also needed. With racial equity as the goal, collaboration

as a tool, and policy as a vehicle, greater attention can be placed on the root causes and the determinants that affect racial equity. Addressing the upstream determinants that affect equity within our communities can bring about positive health outcomes, and should be a priority of the dental community.

Below are successful examples of national, state, and local policies that have addressed determinants of inequities and thus improved dental public health:

National: The Affordable Care Act (ACA) significantly reduced the number of people of color who are uninsured.³⁶ The ACA also greatly expanded dental coverage via Medicaid expansion; states that expanded Medicaid through the ACA had an overall reduction in those without dental insurance, either through Medicaid or private plans. Racial minority populations experienced a more significant gain in dental insured rates compared to White populations. 67 Among the most effective policy changes this country can make surrounding access to dental care is basic universal dental coverage, both under Medicaid and Medicare. Moreover, an overarching shift toward a value-based reimbursement system can facilitate anti-racism in practice by improving access to care, better addressing disparities in outcomes, and prioritizing equity.68

State: Racism impacts access to health care, and addressing inequities in access and quality of care requires policies that support training and expanding the healthcare team.⁶⁹ Policies should encourage patient access to healthcare providers across the spectrum of providers and care delivery modalities; this includes direct access to preventive services by

mid-level providers like dental hygienists and dental therapists. Fifteen states across the U.S. now recognize dental therapists, which are mid-level providers working collaboratively with dentists and other members of the oral health team to expand access to preventive, restorative, and limited surgical care for underserved populations in their communities. 70 States such as Alaska and Minnesota have begun to realize the potential for this workforce to reduce oral health inequities, particularly among American Indian and Alaska Native populations. Many states remain in the planning stages for allowing dental therapist practice, 71 but expansion of this workforce creates considerable potential to reduce racism as members of historically underrepresented minority populations have new career pathways and opportunities to improve access to care. 72 Dental therapy has robust bipartisan support as a mechanism for providing cost-effective and highquality care to the underserved. 73,74 Additionally, dental hygienists are allowed to practice without direct supervision in community-based settings in 42 states.⁷⁵ Policies that support these workforce models have the potential to increase access to dental care for underserved populations and expand the health safety net.

Local: Community water fluoridation (CWF)—one of the ten greatest achievements of public health in the 20th century⁷⁶—benefits everyone in a community and reduces disparities in dental caries.⁷⁷ Studies have demonstrated that CWF has more strongly benefitted individuals who are Black or of lower socioeconomic status compared to White individuals and those of higher socioeconomic status.^{78,79} As a recent example, Spokane, Washington city council voted in 2020 to approve potential implementation of a community water fluoridation initiative, despite never having had community water fluoridation.⁸⁰ A collaborative approach was used to bring about this initiative,

highlighting the effectiveness of advocacy with multiple voices and perspectives.

Policy planning, however, should not only consider how health-minded policies will improve racial equity, but also how racial equity-minded policies will improve health. By addressing policy-making determinants of racial equity, communities and individuals can receive the resources needed to achieve optimal health. In addition to collaborating with traditional dental public health partners, working with other organizations to change inequitable policies related to mass incarceration, environmental conditions, food insecurity, housing instability, and other determinants can potentially reduce racial inequities and improve health. Dental organizations and institutions can start the process of equity promotion by evaluating their own policies. Reviewing internal policies for equity and diversity in hiring and academic admissions practices can help identify systemic biases within organizations. Dental organizations should ensure the presence of their own diversity policies that provides a clear, uniform prioritizing of racial equity.

Policy planning...should not only consider how health-minded policies will improve racial equity, but also how racial equityminded policies will improve health.

The dental community can also operationalize its equity promotion efforts through advocacy. Critical to effective advocacy is collaboration with other stakeholders, including other professional organizations, academic institutions, non-profit organizations, or individuals. Collaborative advocacy can focus on policies targeting racial inequities and racism which, when properly addressed, can help improve access to dental care.

While many dental public health organizations can have a national presence, their members and student chapters are more advantageously positioned to identify the racial inequities leading to poor dental health outcomes in their communities.

Providing the membership and student organizations with resources and guidance on effective advocacy practices for policies affecting racial equity should be a focus of the dental public health organizations in the future. Empowering student chapters and members with knowledge on how to effectively and confidently engage in advocacy activities on a local and state level can help

address specific community racial inequities that bring about poor dental health. Students and dental public health organization members can be encouraged to collaborate with not only local and state dental associations, but also other organizations ranging from local and state governments to grassroots organizations to effect change on policy issues affecting the racial inequities in their communities. Organizations can make freely available a repository of practical examples of racial equity advocacy, policies, and lessons learned in regard to improving dental health outcomes.

Action items:

Systemic racism and discrimination call for systemic solutions. The dental public health community can contribute by reflecting on current and future internal policies and programs to ensure they are not missing opportunities to address racism. Collaborating and advocating at all levels of public health – national, state, and local – to address determinants of racial equity can move communities toward better oral and overall health.

The Council on Policy will focus on including anti-racism principles into policies that promote dental public health. Additionally, the following action items are offered to drive advocacy and policy efforts to improve oral health equity and diversity:

- Review and revise existing organizational diversity policies to address the importance of representation of historically underrepresented minority dentists in the profession and specialty.
- Focus community-based policy initiatives on correcting longstanding oral health inequities experienced by underrepresented minority populations.
- Use both a "health in all policies" and a "racial equity in all policies" approach to local, state, and national policy development and review.
- Within AAPHD:
 - Craft an operational policy to ensure that all future AAPHD policies are reviewed for incorporation of a racial equity lens.
 - Review all existing policies for impact on addressing racial inequities, and revise and update accordingly.
 - Form a diversity council to review membership efforts, and advocacy efforts, and make recommendations for incorporating a racial equity-based approach going forth.

ANTI-RACISM IN DENTAL PUBLIC HEALTH PRACTICE

Authored by the AAPHD Council on Practice

Using racial justice and equity to inform priorities, anti-racism envisions a dental care system that serves all people. In practice, this looks like diverse dental teams that include the communities they serve, reimbursement modalities rewarding health and prevention rather than treatment, and an educational system that explores the social determinants of oral health, including racism, just as meticulously as the biological ones. It looks like prescriptions for healthy foods and vouchers for transportation. It looks like mid-level providers who can bridge gaps in access by providing culturally sensitive education and preventive care to those unable or unwilling to traditionally access the healthcare system—providers who can meet people where they are both physically and mentally. In short, it looks like a dismantling of our current ways of thinking around traditional dental practice.

Racial inequities in dental practice

Racial inequities in population health are largely the result of structural racism and racist policies. ⁸¹ The burden of oral diseases and access to preventive and treatment services are not evenly distributed across populations. Racial inequities in oral health outcomes are concerning, but they are not inevitable. To dismantle them, we must understand how personal and professional practices support race as a social construct and entrench structural racism. ⁸ Thus, it is important that we as a dental community consider the vulnerabilities in our system that have brought us to this point.

Dental care, at its core, should provide high-quality, high-value services that are safe and equitable. The private practice, fee-for-service model in the United States rewards specialization and innovation, and in turn delivers among the highest quality care in the

world. However, this same system leaves over 59 million Americans without adequate access to care⁸²—a crisis resulting from years of healthcare and economic policymaking that has failed to sufficiently address critical issues affecting dental practice.

Impact of Structural Racism: Racial disparities in oral health are particularly unyielding due to the fact that dental care continues to present higher levels of financial barriers than other types of health care.83 Legacies of structural racism excluding minority groups from economic opportunity only serve to magnify this barrier; not only do they limit disposable income, they also decrease the likelihood of having workplace dental insurance. These structural barriers have contributed to a widening racial wealth gap that sees the median White household net worth now about 10 times the median Black household, despite Black families having higher savings rates at comparable incomes.84 Policies and programs must be developed to increase economic opportunities for those who have been historically excluded from it.

Impact of Personally Mediated Racism: Racial discrimination, along with a historical mistrust of the healthcare system, has contributed to a lower uptake of dental services among minority groups. S5,86 Racism has also been shown to directly affect a variety of health outcomes for many populations in the United States, including hypertension and low birth weight. For example, Black newborns are twice as likely to survive when treated for by a Black physician instead of a White physician. While the authors did not find conclusive evidence as to why this disparity exists, the paper is yet another reminder that racism and

racial inequity must continue to inform healthcare policy decisions. To be sure, structural racism impacts health care both for clinicians and health systems. ⁸⁹ The effects of structural racism continue to plague the healthcare system, resulting in higher costs, poorer outcomes, and overall, inefficient care.

Workforce Issues: A more diverse workforce would expand access to care, advance cultural sensitivity, and help ensure equitable policymaking and management. As it stands, the oral health workforce would need at least four times more underrepresented minority dentists than are currently practicing to reach parity with the general population. At the current rate of provider turnover, it would take 172 more years to close this parity gap. At the current rate of provider

While the lack of underrepresented minority dentists is a multifactorial problem that is unlikely to be resolved quickly, it remains critical that we ensure that the community participates in the oral healthcare system. Patients are best served when there is a mutual trust and understanding between them and their healthcare team. Thus, community health workers, mid-level providers, and other interdisciplinary care providers (physicians, nurses, social workers, et al.) should all be included as part of an expanded, community-based team that monitors and promotes oral health in tandem with social and systemic ailments.

In addition to healthcare teams composed of diverse providers, different modalities of care may also help to dislodge structural racism's effects on access to oral health care. Access to care can be improved using technology and different care delivery modalities. Whether in the form of telehealth systems or consumer e-health tools such as smartphone applications, technology has been used to improve outcomes, support patient engagement, and improve quality of care.⁹³ However, similar to

health care, access to telehealth is not distributed equally across populations. Given the digital divide, technologies such as a telehealth can exacerbate disparities and entrench structural racism even further. ⁹⁴ Thus, a more widespread adoption of telehealth and cloud-based care delivery must be accompanied by the support of policies such as increased broadband access and regulated broadband service to ensure equitable access. For dental public health practice to be anti-racist practice, access to care in all of its forms should be equitable and barriers such as the digital divide that impede care must be removed.

Given the workforce shortages, interprofessional dental care delivery may need to take place in locations outside of a traditional brick and mortar dental clinic. Mobile and portable dental services have proven efficacious in delivery care to underserved populations, especially for individuals who face transportation barriers to accessing care. ⁹⁵ Serving a majority African American population in rural South Carolina, CareSouth Carolina, a federally qualified health center, has used mobile dental services in school-based settings to provide preventive services and treatment services to children and adults. ⁹⁶

An additional workforce issue is the reluctance of dentists to enroll as Medicaid providers. The American Dental Association Health Policy Institute found that only 39 percent of U.S. dentists participate in Medicaid or Children's Health Insurance Program for child dental services, which is likely an overestimate as it measures dentists who are enrolled as Medicaid providers but does not take into account how many Medicaid beneficiaries they actually treated.⁹⁷ While low reimbursements and excessive administrative requirements have long been barriers reported by providers for why they do not accept Medicaid, a study of Florida dentists found that there is also a perceived stigma among

providers about dentists accepting Medicaid. 98
Dentists who are members of underrepresented minority groups are more likely to accept Medicaid. 99 This finding, in part, has resulted in calls to improve workforce diversity as a means to increase access to care for underserved populations overall. This argument reinforces structures of

racism because it essentially asks minority dentists to continue to shoulder a disproportionate burden of service to underserved groups rather than focusing on efforts to improve Medicaid participation among White providers.

Action steps:

Anti-racism requires all of us to be open to listening and learning about others' experiences. Priority setting must be approached with a focus on collaboration and empathy in order to best address issues that may be otherwise ignored or misunderstood. There are several avenues that should be explored as a dental public health community to commit to the ideals of anti-racism in clinical and dental public health practices.

Addressing systemic racism in dental public health practice may lend itself to addressing these issues in clinical dentistry as well. Anti-racism can improve oral health outcomes and further racial equity. The Council on Practice aims to promote anti-racism in dental practice.

- Expand on existing efforts to improve access and deliver effective care for increasingly diverse populations.
 - Redefine and expand the "oral health care team" to include inter-professional colleagues, community health workers, and those addressing relevant determinants of health.
 - Community oral health workers can provide community-informed, tailored educational interventions to help bridge the Oral Health Literacy Gap
 - Inter-professional colleagues can be engaged to provide more comprehensive, whole person care focused on disease management and prevention
 - Leverage mid-level providers like dental therapists and direct access dental hygienists to help close geographic disparities in access
 - Embrace mobile and telehealth technologies to increase access to providers
 - These also can be used to address relevant, community-specific barriers to oral health
 access to transportation, food, and addressing the digital divide.
- Improve student interest in public health dental practice
 - Approaches to building student interest in dental public health careers could include increasing community-based clinical opportunities in dental educational programs and increasing incentives for continued practice in Health Professional Shortage Areas (HPSAs)
- Support and increase recruitment efforts of various types of providers from historically underrepresented communities
- Advocate for reform in the financing of dental care delivery, including:
 - Value-based reimbursement models that reward disease management and prevention rather than treatment
 - Including mandatory comprehensive dental benefits in Medicaid and Medicare

ANTI-RACISM IN DENTAL PUBLIC HEALTH: A CALL TO ACTION—COMMENTARY

Authored by Caswell A. Evans, DDS, MPH, Professor Emeritus in Pediatric Dentistry, Prevention and Public Health at the University of Illinois Chicago College of Dentistry

The AAPHD, exhibiting its leadership role, has issued a bold white paper. Now in our lifetime, racism has never been more in public focus. AAPHD's Call to Action outlines critical steps in dental public health science, education, policy, advocacy, and practice. The paper touches upon key points that place racism in the appropriate context. The challenges of oral health inequities stem from racism, not the social construct called "race."

After more than twenty years, study of the human genome has yet to disclose a genetic sequence or identifier that permits racial identification. Genetic sequences can suggest geographic areas where similar sequences are found; but that does not signify race. Humans evolved about 2.5 million years ago in the form of several species. Among them only Homo sapiens survived. They migrated from Africa, into Europe, across Eurasia, into the Americas, on to Australia and eventually all land masses of the planet. Over the millennia, Homo sapiens were shaped by their environments resulting in physical modifications best suited for survival. This process resulted in differences among Homo sapiens. In the 17th century, based on their exploratory experiences to other lands Europeans began to categorize people by appearance and characteristics. Let us be clear, the characteristics were judged from the European perspective. In time, further social interpretation attributed hierarchical judgements regarding population qualities and values. This set the base for maltreatment and exploitation of

populations judged to be inferior. The near extinction of Native Americans, development of the slave trade, and internment of Japanese Americans during WW II were definitive outcomes in the United States.

Race in a social construct which is key to understanding that racism is the issue, not race. It takes commitment and diligence to keep race in perspective given the volume of data compiled by racial categories in health. Without a clear scientific distinction for race, we must credit the social determinants of health with shaping varying health outcomes among populations. It is at this point that racism takes its effects; the social determinants of health have been molded by racism. As referenced in the discussion of Dental Public Health Science, when we ponder oral health data among population groups commonly characterized by racial identifiers, we must consider the nature and extent that the upstream effects of racism have contributed to the findings.

Dental Public Health Education should be explicit in focusing on cultural humility and anti-racism curricula. However, too little is known about existing racism. Studies of students and faculty of color, regarding racism they may have experienced in the context of their educational experiences could be illuminating. Despite CODA standards for diversity, there are dental schools that continue to have few students or faculty of color, if any.

Regarding Policy, a "racial equity in all policies" mindset is fundamental to change and progress. The proposed action steps regarding policy and advocacy are strong and should serve as guiding principles.

The unremitting issues in Dental Public Health Practice are inequalities in access to care that result in oral health inequities. The population cohorts comparatively least in need of care, receive the most; the population cohorts most in need of care, receive the least. Given the demographic profile of the latter group, the influence of racism in this outcome is an appropriate consideration, if not a foregone conclusion. Dentistry has a care delivery system that seems incapable of resolving these inequities and at the same time fights against system innovation and workforce advances that seem to hold promise. It was Don Berwick who reminded us that every system is perfectly designed (and I would add, maintained) to achieve exactly the intended results.

AAPHD in this Call to Action has taken bold and commendable steps recommending anti-racism actions and advocacy. The problem statements, narrative, and proposed action agenda outline paths forward. Another, and new developed entity, the Coalition of Dentists for Health Equity is also tightly focused on health equity, access to care, social justice and other factors for which racism is a seminal causal factor. The Coalition's position statements are posted on its website. AAPHD and the Coalition can work collaboratively in advocacy and actions to foster anti-racism in dental public health and oral health generally.

AAPHD's strident message should be disseminated broadly and should serve to prompt other organizations to take similar steps. The silence on these matters across the oral health domain must not stand. Silence about and lack of attention and consideration for anti-racism advocacy by oral health proponents supports racism and its acidic effects. If dental public health advocates fail to speak out and provide leadership regarding anti-racism, what other entity in oral health domain will? If not us, who? If not now, when?

References

- 1. American Public Health Association. Structural Racism is a Public Health Crisis: Impact on the Black Community. APHA Policy Statement LB20-04. October 2020. Available at: https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2021/01/13/structural-racism-is-a-public-health-crisis
- 2. Fouad MN, Ruffin J, Vickers SM. COVID-19 is disproportionately high in African Americans. This will come as no surprise... Am J Med. 2020;133(10):e544-e545.
- 3. Kullar R, Marcelin JR, Swartz TH, Piggott DA, Macias Gil R, Mathew TA, Tan T. Racial Disparity of Coronavirus Disease 2019 in African American Communities. J Infect Dis. 2020 Aug 17;222(6):890-893.
- 4. Centers for Disease Control and Prevention. Oral Health Surveillance Report: Trends in Dental Caries and Sealants, Tooth Retention, and Edentulism, United States, 1999–2004 to 2011–2016. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2019.
- 5. U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.
- 6. Cunningham TJ, Croft JB, Liu Y, Lu H, Eke PI, Giles WH. Vital Signs: Racial Disparities in Age-Specific Mortality Among Blacks or African Americans United States, 1999-2015. MMWR Morb Mortal Wkly Rep. 2017 May 5;66(17):444-456.
- 7. Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: Evidence and interventions. Lancet 2017;389:1453-1463.
- 8. Kendi, Ibram X. How to be an Antiracist. New York: One World, 2019.
- 9. Betancourt JR, Maina AW. The Institute of Medicine report 'Unequal Treatment': implications for academic health centers. Mt. Sinai J Med. 2004;71: 314–321.
- 10. Williams DR, Lawrence JA, Davis BA. Racism and Health: Evidence and Needed Research. Ann Rev Public Health. 2019;40.
- 11. Jenkins WC, Schoenbach VJ, Rowley DL, Ford CL. 2. Overcoming the Impact of Racism on the Health of Communities: What We Have Learned and What We Have Not. Racism: Science & Tools for the Public Health Professional. 2019. doi:10.2105/9780875533049ch02.
- 12. Jones CP. Levels of racism: a theoretic framework and a gardener's tale. American Journal of Public Health. 2000;90: 1212–1215.
- 13. Ford CL, Jeffers KS. 16. Critical Race Theory's Antiracism Approaches: Moving from the Ivory Tower to the Front Lines of Public Health. Racism: Science & Tools for the Public Health Professional. 2019. doi:10.2105/9780875533049ch16.
- 14. Paradies Y, et al. Racism as a Determinant of Health: A Systematic Review and Meta-Analysis. PLOS ONE. 2015;10: e0138511.
- 15. Thorpe RJ, et al. Accelerated Health Declines among African Americans in the USA. Journal of Urban Health. 2016;93: 808–819.
- 16. Krieger N. Does Racism Harm Health? Did Child Abuse Exist Before 1962? On Explicit Questions, Critical Science, and Current Controversies: An Ecosocial Perspective. American Journal of Public Health. 2008;98:S20–S25.
- 17. Williams DR, Mohammed SA. Racism and Health I. American Behavioral Scientist. 2013;57:1152–1173.
- 18. Phelan JC, Link BG. Is Racism a Fundamental Cause of Inequalities in Health? Annual Review of Sociology 2015;41:311–330.
- 19. American Public Health Association [Internet]. Disparities in the US. 2018. Available at: https://www.apha.org/what-is-public-health/generation-public-health/disparities-in-the-us. Accessed April 12, 2018.
- 20. Braveman PA, Cubbin C, Egerter S, Williams DR, Pamuk E. Socioeconomic disparities in health in the United States: what the patterns tell us. American Journal of Public Health. 2010;100(Suppl 1): S186–96.
- 21. Lee JY, Divaris K. The Ethical Imperative of Addressing Oral Health Disparities. Journal of Dental Research 2014;93:224–230.

- 22. Centers for Disease Control and Prevention [Internet]. Oral Health Surveillance Report: Trends in Dental Caries and Sealants, Tooth Retention, and Edentulism, United States, 1999–2004 to 2011–2016. 2019. Available at: https://www.cdc.gov/oralhealth/pdfs and other files/Oral-Health-Surveillance-Report-2019-h.pdf
- 23. Huang DL, Park M. Socioeconomic and racial/ethnic oral health disparities among US older adults: oral health quality of life and dentition. Journal of Public Health Dentistry. 2015;75:85–92.
- 24. Thornton-Evans G, et al. Periodontitis among adults aged ≥30 years United States, 2009-2010. MMWR Suppl. 2013;62:129–135.
- 25. Shiboski CH, Schmidt BL, Jordan RC. Racial disparity in stage at diagnosis and survival among adults with oral cancer in the US. Community Dent Oral Epidemiol. 2007;35:233–240.
- 26. Jassal JS, Cramer JD. Explaining Racial Disparities in Surgically Treated Head and Neck Cancer. Laryngoscope. 2020. doi:10.1002/lary.29197.
- 27. Manski RJ, Rohde F. Dental Services: Use, Expenses, Source of Payment, Coverage and Procedure Type, 1996–2015: Research Findings No. 38. November 2017. Agency for Healthcare Research and Quality, Rockville, MD. https://meps.ahrq.gov/data_files/publications/rf38/rf38.pdf
- 28. Buchmueller TC, Levy HG. The ACA's Impact on Racial and Ethnic Disparities in Health Insurance Coverage and Access to Care. Health Affairs. 2020;39(3):395-402.
- 29. Liu J, Probst JC, Martin AB, Wang J-Y, Salinas CF. Disparities in Dental Insurance Coverage and Dental Care among US Children: The National Survey of Children's Health. Pediatrics. 2007:119(Suppl 1):S12-21.
- 30. Child and Adolescent Health Measurement Initiative. National Survey of Children's Health, 2018-2019. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved [12/16/20] from [www.childhealthdata.org].
- 31. Zhang W, Wu YY, Wu B. Racial/Ethnic Disparities in Dental Service Utilization for Foreign-Born and U.S.-Born Middle-Aged and Older Adults. Research on Aging. 2019;41:845–867.
- 32. Lutfiyya MN, Nawal Lutfiyya M, Gross AJ, Soffe B, Lipsky MS. Dental care utilization: examining the associations between health services deficits and not having a dental visit in past 12 months. BMC Public Health. 2019;19.
- 33. Pourat N, Finocchio L. Racial and ethnic disparities in dental care for publicly insured children. Health Affairs. 2010;29:1356–1363.
- 34. Como D, Duker LS, Polido J, Cermak S. The Persistence of Oral Health Disparities for African American Children: A Scoping Review. International Journal of Environmental Research and Public Health. 2019;16(5):710.
- 35. Velez D, Palomo-Zerfas A, Nunez-Alvarez A, Ayala GX, Finlayson TL. Facilitators and Barriers to Dental Care Among Mexican Migrant Women and Their Families in North San Diego County. Journal of Immigrant and Minority Health. 2017;19(5):1216–1226.
- 36. Artiga, S., Orger, K., Damico, A. (March 5, 2020). Changes in health coverage by race and ethnicity since the ACA, 2010-2018. Kaiser Family Foundation. https://www.kff.org/racial-equity-and-health-policy/issue-brief/changes-in-health-coverage-by-race-and-ethnicity-since-the-aca-2010-2018/
- 37. Kramarow EA. Dental Care Among Adults Aged 65 and Over, 2017. NCHS Data Brief, no 337. Hyattsville, MD: National Center for Health Statistics. 2019.
- 38. Flores G, Lin H. Trends in racial/ethnic disparities in medical and oral health, access to care, and use of services in US children: has anything changed over the years? International Journal for Equity in Health. 2013;12(10).
- 39. Goodman MS, Thompson VS. 13. Scientific Literacy: An Opportunity for Meaningful Engagement of Communities of Color in Public Health Research. Racism: Science & Tools for the Public Health Professional. 2019. doi:10.2105/9780875533049ch13.
- 40. Brody JL, Dalen J, Annett RD, Scherer DG, Turner CW. Conceptualizing the Role of Research Literacy in Advancing Societal Health. Journal of Health Psychology. 2012;17:724–730.
- 41. Hines S, Ramsbotham J, Coyer F. Interventions for improving the research literacy of nurses: a systematic review. JBI Database of Systematic Reviews and Implementation Reports. 2016;14:256–294.

- 42. Goodman MS, Dias JJ, Stafford JD. Increasing research literacy in minority communities: CARES fellows training program. J. Empir. Res. Hum. Res. Ethics. 2010;5:33–41.
- 43. Bastos JL, Constante HM, Celeste RK, Haag DG, Jamieson LM. Advancing racial equity in oral health (research): more of the same is not enough. Eur. J. Oral Sci. 2020. doi:10.1111/eos.12737.
- 44. Bonilla-Silva E. Rethinking Racism: Toward a Structural Interpretation. American Sociological Review. 1997;62:465.
- 45. Reskin B. The Race Discrimination System. Annual Review of Sociology. 2012;38:17–35.
- 46. Graham L, Brown-Jeffy S, Aronson R, Stephens C. Critical race theory as theoretical framework and analysis tool for population health research. Critical Public Health. 2011;21: 81–93.
- 47. Srinivasan S, Williams SD. Transitioning from health disparities to a health equity research agenda: the time is now. Public Health Rep. 2014;129 Suppl 2:71–76.
- 48. Kilbourne AM, Switzer G, Hyman K, Crowley-Matoka M, Fine MJ. Advancing health disparities research within the health care system: a conceptual framework. Am. J. Public Health. 2006;96:2113–2121.
- 49. Alvidrez J, Castille D, Laude-Sharp M, Rosario A, Tabor D. The National Institute on Minority Health and Health Disparities Research Framework. Am. J. Public Health. 2019;109:S16–S20.
- 50. National Minority Health and Health Disparities Research Framework. https://www.nimhd.nih.gov/about/overview/
- 51. Commission on Dental Accreditation. Accreditation Standards for Dental Education Programs. 2019. Accessed January 10, 2021 from https://www.ada.org/~/media/CODA/Files/predoc_standards.pdf?la=en.
- 52. Commission on Dental Accreditation. Accreditation Standards for Advanced Dental Education Programs in Dental Public Health. 2020. Accessed January 10, 2021 from https://www.ada.org/~/media/CODA/Files/dph.pdf?la=en.
- 53. American Dental Association Health Policy Institute. Racial and Ethnic Mix of the Dentist Workforce in the U.S. April 2021. American Dental Association. Chicago, IL.
- 54. Toretsky C, Mutha S, Coffman J. Breaking Barriers for Underrepresented Minorities in Health Professions. Healthcare Center at UCSF. 2018. Available from https://healthforce.ucsf.edu/publications/breaking-barriers-underrepresented-minorities-health-professions
- 55. Health Resources & Services Administration. Scholarships for Disadvantaged Students. 2020. Accessed January 10, 2021 from https://www.hrsa.gov/grants/find-funding/hrsa-20-006
- 56. Health Resources & Services Administration. Health Workforce. 2020. Accessed January 10, 2021 from https://bhw.hrsa.gov/
- 57. Amah G, Jura M, Mertz E. Practice Patterns of Postgraduate Dental Residency Completers From Select Long-Term HRSA-Funded Primary Dental Care Training Programs. Rensselaer, NY: Oral Health Workforce Research Center, Center for Health Workforce Studies, School of Public Health, SUNY Albany; July 2019.
- 58. American Dental Education Association. ADEA Faculty Diversity Toolkit. 2020. Access January 10, 2021 from https://www.adea.org/diversitytoolkit/
- 59. Mitchell DA, Lassiter SL. Addressing health care disparities and increasing workforce diversity: the next step for the dental, medical, and public health professions. American Journal of Public Health. 2006;96(12):2093-7.
- 60. Alrqiq HM, Scott TE, Mascarenhas AK. Evaluating a Cultural Competency Curriculum: Changes in Dental Students' Perceived Awareness, Knowledge, and Skills. J Dent Educ. 2015;79(9):1009-15.
- 61. Su Y, Behar-Horenstein LS. Color-Blind Racial Beliefs Among Dental Students and Faculty. J Dent Educ. 2017;81(9):1098-1107.
- 62. McCann AL, Lacy ES, Miller BH. Underrepresented minority students' experiences at Baylor College of Dentistry: perceptions of cultural climate and reasons for choosing to attend. J Dent Educ. 2014;78(3):411-22.
- 63. Patel N, Patel S, Cotti E, Bardini G, Mannocci F. Unconscious Racial Bias May Affect Dentists' Clinical Decisions on Tooth Restorability: A Randomized Clinical Trial. JDR Clin Trans Res. 2019;4(1):19-28.
- 64. Office of Disease Prevention and Health Promotion. (n.d.). Discrimination. Healthy People 2030. U.S. Department of Health and Human Services. https://health.gov/healthypeople/objectives-and-data/social-determinants-health/literature-summaries/discrimination

- 65. Centers for Disease Control and Prevention. (n.d.). 10 essential public health services. https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html
- 66. Wyss, K., Dolan, K., & Goff, N. (n.d.). Health in all policies: A framework for state health leadership. Association of State and Territorial Health Officers. https://www.astho.org/HiAP/Framework/
- 67. Elani HW, Sommers BD, Kwachi I. Changes in coverage and access to dental care five years after ACA Medicaid expansion. Health Affairs. 2020;39(11):1900-1908.
- 68. "Value-Based Health Care Must Value Black Lives," Health Affairs Blog, September 3, 2020. DOI: 10.1377/hblog20200831.419320.
- 69. Williams DR, Rucker TD. Understanding and addressing racial disparities in health care. Health Care Financ Rev. 2000;21(4):75-90.
- 70. National Conference of State Legislatures (NCSL), Association of State and Territorial Health Officials (ASTHO). September 2020. Dental Therapists, Oral Health Providers, Scope of Practice Policy. http://scopeofpracticepolicy.org/practitioners/oral-health-providers/
- 71. American Dental Hygienists' Association. September 2020. Expanding access to care through dental therapy. https://www.adha.org/resources-docs/Expanding_Access_to_Dental_Therapy.pdf
- 72. Yee A, McGlaston K, Restuccia R. How dental therapists can address the social and racial disparities in access to care. American Journal of Public Health. 2017;107(Suppl 1):S28-S29.
- 73. Hale L. Bipartisan support for dental therapy grows. July 13, 2020. Community Catalyst. https://www.communitycatalyst.org/blog/bipartisan-support-for-dental-therapy-grows#.X7qMj81KiUk
- 74. Koppelman J, Vitzthum K, Simon L. Expanding where dental therapists can practice could increase Americans' access to cost-efficient care. Health Affairs. 2016;35(12):2200-2206.
- 75. American Dental Hygienists' Association. Facts about the dental hygiene workforce in the United States. 2019. https://www.adha.org/resources-docs/75118 Facts About the Dental Hygiene Workforce.pdf
- 76. Centers for Disease Control and Prevention. Ten great public health achievements United States, 1900-1999. 1999. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm4850bx.htm
- 77. Burt BA. Fluoridation and social equity. Journal of Public Health Dentistry. 2002;62(4):195-200.
- 78. Neidell M, Herzog K, Glied S. The association between community water fluoridation and adult tooth loss. American Journal of Public Health. 2010;100(10):1980-5.
- 79. Matsuo G, Aida J, Osaka K, Rozier RG. Effects of community water fluoridation on dental caries disparities in adolescents. Int J Environ Res Public Health. 2020;19(17):2020.
- 80. Burger D. Spokane moving forward on possible adoption of community water fluoridation. ADA News [online]. 2020. https://www.ada.org/en/publications/ada-news/2020-archive/november/spokane-moving-forward-on-possible-adoption-of-community-water-fluoridation
- 81. Bailey ZD, Feldman JM, Bassett MT. How structural racism works racist policies as a root cause of U.S. racial health inequities. N Engl J Med. 2021 25;384(8):768-773.
- 82. Bureau of Health Workforce Health Resources and Services Administration (HRSA), U.S. Department of Health & Human Services. Designated Health Professional Shortage Areas Statistics. 2020. Accessed Oct 25, 2020 from https://data.hrsa.gov/Default/GenerateHPSAQuarterlyReport
- 83. Vujicic M, Buchmueller T, Klein R. Dental Care Presents the Highest Level of Financial Barriers, Compared to Other Types of Health Care Services. Health Affairs. 2016;35(12):2176-82.
- 84. Darity Jr W, Hamilton D, Paul M, Aja A, Price A, Moore A, Chiopris C. What we get Wrong about Closing the Racial Wealth Gap. Samuel DuBois Cook Center on Social Equity and Insight Center for Community Economic Development. 2018 Apr.
- 85. Sabbah W, Gireesh A, Chari M, Delgado-Angulo EK, Bernabé E. Racial Discrimination and Uptake of Dental Services among American Adults. International Journal of Environmental Research and Public Health. 2019;16(9):1558.
- 86. Williams DR, Lawrence JA, Davis BA, Vu C. Understanding how discrimination can affect health. Health Services Research. 2019;54:1374-88.

- 87. Cuffee YL, Hargraves JL, Rosal, M, Briesacher BA, Schoenthaler A, Person S, et al. Reported racial discrimination, trust in physicians, and medication adherence among inner-city African Americans with hypertension. American Journal of Public Health. 2013;103(11):e55–e62.
- 88. Greenwood BN, Hardeman RR, Huang L, Sojourner A. Physician—Patient Racial Concordance and Disparities in Birthing Mortality for Newborns. Proceedings of the National Academy of Sciences. 2020;117(35):21194-200.
- 89. Hardeman RR, Medina EM, Kozhimannil KB. Structural Racism and Supporting Black Lives The Role of Health Professionals. N Engl J Med. 2016;375(22):2113-2115.
- 90. Cohen JJ, Gabriel BA, Terrell C. The Case for Diversity in the Health Care Workforce. Health Affairs. 2002;21(5):90-102.
- 91. Mertz E, Calvo J, Wides C, Gates P. The Black dentist workforce in the United States. Journal of Public Health Dentistry. 2017;77(2):136-47.
- 92. Mertz, E., Wides, C. and Gates, P. The American Indian and Alaska Native dentist workforce in the United States. Journal of Public Health Dentistry. 2017;77(2):125-135.
- 93. Williams JS, Walker RJ, Egede LE. Achieving Equity in an Evolving Healthcare System: Opportunities and Challenges. Am J Med Sci. 2016;351(1):33-43.
- 94. Mitchell UA, Chebli PG, Ruggiero L, Muramatsu N. The digital divide in health-related technology use: The significance of race/ethnicity. The Gerontologist. 2019;59(1):6-14.
- 95. Gupta S, Hakim M, Patel D, et al. Reaching Vulnerable Populations through Portable and Mobile Dentistry-Current and Future Opportunities. Dent J (Basel). 2019;7(3):75.
- 96. Mostetter M, Klein S. Building Partnerships to Improve Health in the Rural South: CareSouth Carolina. Commonwealth Fund Case Study in Primary Care For Low-Income Populations. February 2020. Available from:

 https://www.commonwealthfund.org/sites/default/files/2020-01/Hostetter improve rural htt caresouth carolina cs 0.pdf
- 97. American Dental Association Health Policy Institute. Dentist Participation in Medicaid or CHIP. 2018. Accessed January 11, 2021 from https://www.ada.org/~/media/ADA/Science%20and%20Research/HPI/Files/HPIGraphic 0318 1.pdf?la=en
- 98. Logan HL, Catalanotto F, Guo Y, Marks J, Dharamsi S. Barriers to Medicaid participation among Florida dentists. J Health Care Poor Underserved. 2015;26(1):154-167.
- 99. Okunseri C, Bajorunaite R, Abena A, Self K, Lacopino AM, Flores G. Racial/ethnic disparities in the acceptance of Medicaid patients in dental practices. Journal of Public Health Dentistry. 2008;68(3):149-53.

SUGGESTED CITATION

American Association of Public Health Dentistry (2021). *Anti-Racism in Dental Public Health: A Call to Action* [White Paper]. Springfield, IL.

CO-EDITORS:

- Eleanor Fleming, PhD, DDS, MPH, FICD, Chair of Council on Practice
- Julie Reynolds, DDS, MS, Co-Chair of Council on Scientific Information

CONTRIBUTING AUTHORS:

Council on Scientific Information:

Lead authors:

Shillpa Naavaal, BDS, MS, MPH*
Julie Frantsve-Hawley, PhD

Additional contributing members:

Julie Reynolds, DDS, MS*
Sepideh Banava, DDS, MSc
Mina Habibian, DMD, MSc, PhD
Liang Hong, DDS, MS, PhD
Navita Kalair, BDS, MPH

E. Angeles Martinez Mier, DDS, MSD, PhD

Christina Murphey, RN, PhD Linda Niessen, DMD, MPH Karen Raju, BDS, MPH

Council on Educational Affairs:

Lead authors:

Siddardha Chandrupatla, BDS, MMSc* Christina Demopoulos, DDS, MPH* Richie Kohli, BDS, MS

Meghan Wendland, DDS, MPH

Additional contributing members:

Aderonke Akinkugbe, DDS, MPH, PhD David Cappelli, DMD, MPH, PhD Sohini Dhar, BDS, MPH Salma Elwazeer, BDS, MDSc, MPH Erinne Kennedy, DMD, MPH, MMSc

Susan McKernan, DMD, MS, PhD

Council on Policy:

Lead authors:

Lindsay Wright, DMD, MPH* Chelsea Fosse, DMD, MPH

Additional contributing members:

Monica Hebl, DDS Mary Kelly, MS, RDH

Jessica C. Williams, DMD, FACD

Council on Practice:

Lead authors:

Eleanor Fleming, PhD, DDS, MPH, FICD* Thomas Poelman, DDS, MPH

Additional contributing members:

Steven P. Geiermann, DDS, FACD, FICD

Joseph Grant III, DDS

Michael Monopoli, DMD, MPH, MS

Sharon J. Perlman, DDS, MPH, FACD, FICD, FPFA

Brittany Seymour, DDS, MPH Anubhuti Shukla BDS, MHA Patrick D. Smith, DMD, MPH Taylor Velasquez, DMD, MPH

<u>Invited contributor</u>:

Caswell A. Evans, DDS, MPH

^{*}Council Chair(s)

2020-2021 AAPHD Board of Directors

President

E. Angeles Martinez Mier, DDS, MSD, PhD

President-Elect

John Warren, DDS, MS

Treasurer

Michael McCunniff, DDS, MS

<u>Secretary</u>

Brittany Seymour, DDS, MPH

Immediate Past President Mary Tavares, DMD, MPH

Directors at Large:

Nadia Laniado, DDS, MPH, MSc Armando E Soto-Rojas, DDS

Christina A. Demopoulos, DDS, MPH

American Board of Dental Public Health

Representative

Athanasios Zavras, DMD, DDS, MS, DrMedSc

Associate Member Board Liaisons:

Corinna Culler, RDH, DrPH

Mary Kelly, RDH, MS

Historian

Emery Joseph Alderman, DDS, MPH

Editor, Journal of Public Health Dentistry

Robert Weyant, DMD, DrPH

Newsletter/Social Media Coordinator

Claudia A. Serna, PhD, DDS, MPH

Foundation Chair

David P. Cappelli, DMD, MPH, PhD

Executive Director

Frances Kim, DDS, MPH, DrPH

© 2021 American Association of Public Health Dentistry (AAPHD)