



# Racism and Discrimination as Risk Factors for Toxic Stress – Transcript

**April 28, 2021**

Jennifer Ryan: Hello, and welcome to today's ACEs Aware webinar, where we will be discussing racism and discrimination as risk factors for toxic stress. My name is Jennifer Ryan and I serve as the Executive Vice President at Aurrera Health Group. We are proud to be supporting the ACEs Aware Initiative, on behalf of the Office of the California Surgeon General and the Department of Health Care Services. The mission of the ACEs Aware Initiative is to change and save lives by helping providers understand the importance of screening for Adverse Childhood Experiences and preparing them to respond with evidence-based interventions and trauma-informed care that will mitigate the health impacts of toxic stress. I want to thank those of you who submitted questions in advance of today's webinar. Many of them will be covered during our speaker presentations. We will also have a brief question and answer session at the end of this broadcast.

Jennifer Ryan: Please note, that the webinar chat function is muted for attendees, but you can submit your questions using the Q&A icon at the bottom of your screen. Our ACEs Aware team will respond to you directly, and will also be sharing resources in the chat window throughout the broadcast. We will be posting a recording and transcripts later this afternoon on our website at [www.acesaware.org](http://www.acesaware.org). Now let's begin our program. We have four distinguished speakers today, but first we'll hear a special message from California Surgeon General, Dr. Nadine Burke Harris, who will discuss how exposure to racism and discrimination are risk factors for toxic stress and why the ACEs Aware Initiative is focused on addressing these critical public health issues. Dr. Burke Harris will introduce our other guest speakers who will review the impacts of racism and discrimination on public health across communities, how they act as risk factors for ACE-associated health conditions and how implementing a screening and trauma-informed care principles can help promote health equity. Now I'm excited to turn it over to California Surgeon General, Dr. Nadine Burke Harris.



Dr. Nadine Burke Harris: Welcome to today's ACEs Aware webinar. I'm pleased to be a part of this important conversation about how exposure to racism and discrimination can lead to the toxic stress response. I can't think of a more important conversation to be having right now. The significance of this issue has come into focus even more sharply in the last year, in the context of a nearly 150% increase in anti-Asian hate crimes, in repeated incidents of police killings of black men and women, and a disproportionate burden of COVID-19 cases and deaths in communities of color. Our distinguished speakers today will dive into the research on how exposure to racism and discrimination can serve as risk factors for developing the toxic stress response, affecting the health and well-being of millions of individuals living in California and throughout the United States.

Dr. Nadine Burke Harris: This is the first in a multi-part ACEs webinars series on health equity issues. In the coming months, I look forward to sharing new research findings from our colleagues at the Harvard Center on the Developing Child. The landmark ACE study from 1998, with which many of you are familiar, identified how 10 specific categories of Adverse Childhood Experiences can have serious negative consequences and lifelong health outcomes. Research tells us that ACEs are very common across income, geographic, racial and ethnic boundaries. ACEs affect all communities, and about two thirds of us have experienced at least one ACE.

Dr. Nadine Burke Harris: Now, one question I hear quite often is whether exposure to racism and discrimination is considered an ACE? For that, I want to clarify. Some people use the term ACE to refer to any experience of adversity in childhood. What I call little A, little C, little E's, but in the ACEs Aware Initiative, when we use the term ACE, we're referring to a big A, big C, big E. We're referring specifically to the 10 criteria from the Kaiser CDC study of the same name. The reason we do this, is because it allows us to reference that large body of data that gives us specific information about how an ACE score informs relative risk of multiple health conditions. But racism and other forms of discrimination weren't part of the original ACEs' study, so we don't include them in determining the ACE score. However, the Pediatric Pearls Tool does assess for exposure to discrimination in part two, which is scored separately from the original ACEs in part one.

Dr. Nadine Burke Harris: What we do know, is that research tells us that exposure to racism and discrimination act as risk factors for the development of the toxic stress

response. First, racism and the resulting systemic inequities create conditions that lead to ACEs, such as disproportionate incarceration rates among people of color. CDC data demonstrates that communities of color carry a higher burden of ACEs and are at greater risk of ACE-associated health conditions. Second, low-income communities and communities of color are disproportionately located in environments that have fewer resources for buffering care, such as access to fresh, healthful foods, recreational facilities, green spaces, and healthcare resources. Finally, exposure to racism can act as a direct and chronic stressor. Exposure to racism and discrimination can lead to a prolonged activation of the body's biological stress response and disrupt the normal functioning of neuro-endocrine, immune, metabolic and genetic regulatory system systems.

Dr. Nadine Burke Harris: In other words, exposure to racism can lead directly to the development of the toxic stress response. Each of these factors are likely to increase the risk for toxic stress and ACE-associated health conditions. A key takeaway from the ACEs Aware work is that toxic stress is a health condition that is amenable to treatment. So please consider utilizing the evidence-based strategies presented in ACEs Aware to mitigate toxic stress in your patients who have been exposed to racism or discrimination. In addition, the larger, more systemic issues require systemic solutions. Therefore a public health approach requires us to implement systems to eliminate racism and discrimination. I want to provide my commitment that the ACEs Aware Initiative will continue to address racism and discrimination as critical public health issues that have negative effects on the health and wellbeing of children and adults.

Dr. Nadine Burke Harris: This webinar is focused on exposure to racism and race-based discrimination. Future health equity webinars will also consider the impact on individuals who experience other forms, such as gender and sex-based discrimination that can also serve as risk factors for developing ACEs. Today, it's my great pleasure to introduce our speakers, three experts on health equity, who work at the system-wide, public health level, as well as in clinics providing direct patient care. We are so grateful for the time, expertise and passion that Dr. Aletha Maybank, Chief Health Equity Officer for the American Medical Association, Dr. Ray Bignall, Assistant Professor of Pediatrics, Division of Nephrology and Hypertension at Nationwide Children's Hospital, and Dr. Roy Wade, Pediatrician at Children's Hospital in Philadelphia, bring to this topic. I

hope that you find their work as inspirational and instructive as I do, and that you leave this webinar with a better understanding of what you can do to ameliorate the ways in which racism affects the long-term health and wellbeing of children and families. Thank you again for joining us today.

Dr. Aletha Maybank: Hello, everyone and good to be with you. I want to thank Surgeon General Nadine Burke Harris for inviting me to share some of the work that we've been doing at the American Medical Association, as it relates to operationalizing racial justice. First, just want to make sure we give a land and labor acknowledgement. I am fully aware that I am here, because of all the force sacrificed placed upon many of my ancestors and your ancestors that were already on this land and already forced to this land for the sake of land and labor, and just really acknowledge the indigenous people, as well as those who are of African descent that were forced here more than 400 years ago. We carry our ancestors on our shoulders and we will be continually called to lead this work. This is really critical, I think, to operationalizing racial equity and how we center the experiences, the voices, and the ideas of those people who have been most marginalized within our country.

Dr. Aletha Maybank: This year really marks a very unique year for us, clearly because of COVID-19, but also what has happened. During this time of COVID 19, there's been an acceleration of many opportunities as it relates to health, as an example, telemedicine, where it was creeping along, and then all of a sudden, we have figured out how to do and implement and hopefully strengthen the work around telemedicine and telehealth. I think COVID-19 also brought that same opportunity, as it relates to talking about racism explicitly. Racism was considered in many forums, even still now, very uncomfortable, and almost as if it was a bad word to say, but we know that COVID has absolutely exposed the inequities that have existed for centuries, as well as the public murder of George Floyd almost a year ago, has also forced these conversations and pushed these conversations to name racism as a public health threat and to name racism explicitly.

Dr. Aletha Maybank: Now is the time, how do we figure out what are we going to do beyond these declarative statements? What does it mean? How does it show up in our work? What is the research and evidence that's going to build and need to build around us doing this work? I think that's really important as we start to really talk about the impacts of toxic stress, caused by racism

at all of its levels and how that impacts the body from the time we are young, across generations, and across the lifespan as well, potentially leading to unnecessary, unjust suffering and early death. Just to make sure that we are all on the same page, when we work to define racism and understanding it has been a system that has been around again since the founding of this country, even beforehand, but racism as a system of power and oppression, that structures opportunities and assigned values based on race, it unfairly disadvantages people of color and unfairly advantages whites.

Dr. Aletha Maybank: This is a critical part of the work is one, as we already said, naming racism, but understanding how it's designed and how it's been used to design our opportunities, our conditions that we live in, the power that we have, as it relates specially to financial and political power and the resources that we have as well. This is really important as we start to talk about what do we have to do to dismantle racism, but also mitigate the impacts of the trauma that is caused by racism. But I think we need to also better understand those flows from the root causes, the whole way downstream to how it impacts the individual. So when I say, "across the stream," I mean the root causes and the root causes of... I've mentioned racism, but also the root causes as it relates to the fuel of racism, which is white supremacy. We don't talk about that or name that often enough as well.

Dr. Aletha Maybank: It's important that we start shifting in that direction so that again, we can make sure that our solutions are directed where they need to be. So that when we think about the upstream causes and the root causes of trauma on the body, we have to talk about these systems again, of power and oppression, the structures that exist, and what are we going to uproot, disrupt, dismantle and re-imagine something that's different and really start to structurally address what causes inflammation and how to repair it. As many of you know, who are probably listening to this conference, the adverse childhood conditions, I think is been a remarkable frame on how to really better understand this trauma that leads to inflammation over time, impacts the body, impacts the organs, impacts all of our systems and eventually causes early death and early suffering again. I believe it's been a tremendous movement that we've moved beyond, we've moved beyond just referring to ACEs, but also being inclusive of the context of the social, and the structural, and the historical context of trauma and how that is embodied over generations of time, leading

again, to changes in how our DNAs and genes are expressed, also changes into our body that increases our stress hormones and our cortisol, and it causing inflammation again, leading to these inequities that we know exist across our country and in this society.

Dr. Aletha Maybank: So we, at the Center for Health Equity and at AMA, we're getting ready to release our strategic plan around what are we going to do to operationalize and embed racial justice? Because if we are saying that racism is a root cause for an Adverse Childhood Experience, then we need to work to again, dismantle, disrupt and re-imagine something different. We have to recognize the role that we have as institutions that have contributed to this harm caused by racism across a lifespan and across generations, passed down from generation to generation. So at the institutional level, it's really critical that we look internally and we think about how are we going to embed equity and racial justice in all that we do? How are we going to build alliances and share power? How are we going to ensure that there are opportunities in equity and innovation? Innovation has so much financial power, but oftentimes it's to the exclusion of black and brown communities across this country.

Dr. Aletha Maybank: How are we going to push upstream to address all the determinants of health and how are we going to create pathways for truth, reconciliation and healing? I think are all critical ways that institutions are going to be able to move forward to embed racial justice. Starting with the first one, embed though, I love this quote by Alice Walker where she says, "We'll really be misled if we think we can change society without changing ourselves." Oftentimes, this work of racial justice and equity, the institution has the frame of, "We need to hire a person, somebody like me." Oftentimes, usually there are-

Dr. Aletha Maybank: ... hire a person, somebody like me. Oftentimes, usually they're black and brown, and that person is going to hold the responsibility of ensuring that the organization is doing this work on the outside. That we're engaging in a particular way, we're engaging with certain people, we're developing new partnerships. All of those things are important. We'll be sorely misled, if we think this is the work of one person, even of one team and not the work of the entire institution.

Dr. Aletha Maybank: In addition, to also embodying the idea of an inside, outside strategy that within the institution, our teams need to understand what in the world

equity means in the first place. How does it show up in the day to day decisions that they make and what do they need to do in order to prevent further harm? And that's a whole process. That's an organizational change process that will impact cultural, it'll impact policy, it'll impact research, but it's a very intentional effort that is absolutely critical to move forward in order to do this work well.

Dr. Aletha Maybank: And I think, all of our institutions have structures around workforce equity, which most people kind of lean towards, but also, you have your communications and marketing. How you collect your data, your budgets, and contracting, your leadership. All of these areas need to work on embedding racial and equity and gender equity and social justice. They need to be reflected in all of those areas very distinctly in order to really shift culture, so that we can get to the point of becoming multicultural racial justice organizations with the strong intention and impact to be able to improve health outcomes and contribute to closing the gaps over time.

Dr. Aletha Maybank: We are using the model at the American Medical Association, and we use this model when I was deputy commissioner at the New York City Department of Health to normalize, organize and operationalize. Normalize, just saying, we need to have a shared analysis. This is often the reason why we really can't have conversations around race, power, privilege, because we don't have the same language, we don't have the same understanding. And so that requires some levels of training, for sure. And it requires us to operate with a sense of urgency. But many of us know training is absolutely not enough. And training needs to move beyond implicit bias. Training needs to become a whole bunch of a cadre of structural competencies and anti-racism. For us in medicine, more about public health and frameworks of public health as well.

Dr. Aletha Maybank: Organize, how are we working within our institution to make sure that we are identifying our champions, but making sure the work is moving and there's an accountability system within our institution that we're going to do what it is that we say we're going to do. And then operationalizing, what are the tools that our teams need? What's the data we're going to use to also hold ourselves accountable? What are the tools that our teams need in order to challenge their mental models on a day-to-day basis, so that it becomes habit over time and that we're able to inform culture. And then new to this frame is the wraparound of

trauma informed supports to help. Doing this work is hard work. And we run the risk potentially of re-traumatizing or causing new trauma by doing this in the institutional level. So we have to be very intentional about setting up the systems for trauma-informed supports, but also for healing as well inside of our institutions.

Dr. Aletha Maybank: The next part that I think is really important in terms of operational racial justice is building alliances and sharing power. And I feel many folks who are in the space of equity really have a strong sense of this, of the importance of developing not only just the simple advisory committees of all of our institutions, but how are we going to develop really structures and processes that consistently center the experiences and ideas of historically marginalized people and minoritized people? This is from our own strategic plan, and this is some of the work that we are going to be embarking on as a center for health equity. And I think part of the way that we are really stepping into this, for us, as the American Medical Association, health care kind of institution is, collaborating with existing work.

Dr. Aletha Maybank: We already have a community driven effort in the West Side of Chicago called West Side United led by community members, many folks are engaged. How can we come together to use our financial power, to invest in more upstream opportunities at the neighborhood level? I think is a critical part to getting to investing in health and wellness. However, I think it's also the piece that we're doing, that we're engaging with others that prevents trauma, that prevents that kind of typical top down approach that institutions like the AMA and many others have to kind of put ideas through or put resources in without engaging community around that and potentially re traumatizing the neighborhoods and the people of which we're trying to serve. And so this is a different way of showing up for many of our institutions, especially health care institutions, that we are looking to move forward. And because this existed, we were able in this time of COVID to set up ratio equity rapid response teams in partnership with the city of Chicago and help support some of the data aspects of the work.

Dr. Aletha Maybank: The next part of operationalizing racial justice is, again, I mentioned this earlier, but the importance of really addressing the root causes of the inequity. So naming is a big part of it. So white supremacy, racism, ableism, xenophobia, sexism, classism, all of those are important to



name. And for us at the AMA, our audience is physicians. It's important that we get ... And strengthen their ability to understand the root causes of inequities and how to dismantle and how to reimagine and redesign something new. And making sure that that redesign is in partnership, as I mentioned in the previous slides with those who are suffering the most and suffering the greatest. And so we're working a lot to help support, strengthen physician's knowledge and health system's knowledge around public health and structural and social justice issues.

Dr. Aletha Maybank: And then lastly, in terms of an approach that I'll talk about, is the approach around fostering pathways for truth reconciliation and healing. This past fall, the AMA released, actually passed policy that one name, racism as a public health threat could be leading for the health care sector. Public health has done that for awhile, but also the other two that I think are very leading is ridding our health care system of racial essentialism, as well as supporting the elimination of race as a proxy for ancestry, genetics, biology in med ed research and clinical practice. I think that's going to open the doors for us to do a lot at the institutional level and to help again, dismantle, disrupt the systems of oppression that exist as it relates to racism.

Dr. Aletha Maybank: Our board of trustees, actually this past summer, before passing these policies, after the public murder of George Floyd put forward this pledge, which we're completely committed to actively work to dismantle racist and discriminatory policies and practices across health care. It's going to take lots of work and lots of energy to get to the point where, it's really completely visible, where we're hold completely accountable to doing that work. And we're showing up with the message that we are putting forward, in the shoes of the message that we're putting forward.

Dr. Aletha Maybank: And so what's very clear though, that no set of commitments to anti-racism can begin without an honest assessment of our institution's own history and practices. And many folks are well aware of AMA's history of exclusion of black physicians up until the 1960s, so for almost over a 100 years. Also, the Flexner Report of 1910, that was commissioned by our AMA's council of medical education, in which it recommended the closure of five of the seven black schools, which did end up closing. And that has significant impact on the presence and the lack of presence and the exclusion of black physicians still to this day in the medical profession. It also impacted clearly their families and impacted the communities that

they were serving as well. There are other harms as well that we have to own, and we need to name that they existed.

Dr. Aletha Maybank: And so our work will be to really amplify and integrate those narratives that are often hidden intentionally. And to amplify those, but also to quantify and qualify the effects of our policies and how they have harmed and then figure out what are the ways and processes that we're going to repair and cultivate healing from those harms as well. I think that's going to be intentional. I think work that we're going to have to really not only do kind of in isolation, we can't do this work alone, but also do in partnership of many stakeholders. Internal, external, beyond the system of health care and across many disciplines.

Dr. Aletha Maybank: We have issued an apology in 2008 as part of this work of reconciliation and healing by our former president, Ron Davis. Who, in this said, "We have the power of AMA to right the wrongs of the past." This is really just an apology to the black physicians and their families and their patients, but there's so much more that we need to do and to continue to embark on. So an apology is an important first step, but clearly not enough. Most recently our CEO Jim Madara, actually after reading a very well-written, well-studied article published by the NMA and AMA in the early 2000s, which really highlighted the history of the father of AMA, Nathan Davis. Who explicitly, and really said that women in black should be excluded from representation in our house of delegates.

Dr. Aletha Maybank: After reading that, Dr. Madara our CEO in February on a decision of his own said that the bust of Dr. Davis was going to be removed from public view in our headquarters and placed in the archives, where it will be served as educational materials. And then additionally, the AMA and the board removed this from an award as well. So these are small steps, but definitely necessary steps. And there is again, much more work that we do need to do, but I think this is the important work when we talk about, how do we start to put in place trauma and perform supports? But more so, how do we start to get to the point of healing? We need to focus on lenses of truth, reconciliation, healing, and transformation. Gail Christopher, who is now head of the National Collaborative for Health Equity has really led up a lot of that work from the time that she was at WK Kellogg until now. And I highly recommend folks at the institutional level to really check out those tools, to help guide on how you should operate as an institution moving forward.

Dr. Aletha Maybank: And then lastly, just to end up with whose work is this? This has come up a lot for me lately. As many folks know, we at the American Medical Association have a journal, called the Journal of American Medical Association who about a month ago posted a podcast that was just horrible and very racist. And just demonstrated the tremendous amount of work that still needs to happen at our institutions. But it also really is highlighted for me at this particular time, whose work is this? Again, we as black and brown folks and people and leaders, we have been shouting from the mountaintops for centuries that injustice exists. We have data to show it and some of it, we don't have data, particularly to show it. But we know it exists because it's our lived experience. We know what that harm feels like. We know what the trauma feels like. And I've been really talking with a lot of folks about, what does allyship even mean? And oftentimes, allyship comes off extremely passive, as if somebody is waiting to be called in. And I just say, there's no need to wait to be called in. I'm looking for accomplices and co-conspirators to lead this work and to be disruptors at the institutional level to work to dismantle white supremacy and structural racism. That's where we're at, at this point in this country. In this work, we must always remember that there are bodies, there are people that we are serving beyond the charts.

Dr. Aletha Maybank: I love this quote by Ta-Nehisi Coates. "That we must always remember that the sociology, the history, the economics, the graphs, the charts, the regressions, all land with great violence upon the body." And that we can't be silent, but we must remember the humanity of us all as we go through this and figure out what do we do to remedy the realities around the adverse childhood conditions, especially with racism, being one of the root causes of that. The toxic stress that it causes, the harm to not only the physical body, but the spirit and the soul and the heart across generations. And ultimately, figuring out how we as individuals and institutions want to show up to do better and to be better. Thank you.

Dr. Ray Bignall: Thank you so much. I want to thank Surgeon General Burke Harris and the ACEs Aware team there in California, for the wonderful invitation to speak to you all today. It really is an honor of mine to speak with you and to speak alongside such luminaries in our field. Some of you may be clinicians or providers, others are researchers or child health and community leaders, but all of us care deeply about caring for children. And in our brief time together today, we won't be able to really substantively, unpack the impact of systemic racism on child health. But



my hope is that our discussion will inspire you to consider how racism and structural inequality impact your work, to identify, mitigate, and eliminate ACEs in our community.

Dr. Ray Bignall: So to accomplish this, our objectives are simple, but ambitious. First, I would like for us to distinguish between systems of inequality like systemic anti-black racism and adverse childhood events, both of which contribute to devastating child health disparities that we see here in the United States. I want to briefly highlight a couple of the racial and ethnic health disparities that we see in pediatrics. Suggesting a framework for recognizing in your own work, the link between those systems. Systems of inequality and ACEs, which imperil child health. And then I want to discuss steps that we can take as child health professionals and community leaders to mitigate these harms and promote healthier futures for all children.

Dr. Ray Bignall: The resurgence of the movement for black lives that all of us really have experienced within recent years, forces us ...

Dr. Ray Bignall: ... that all of us really have experienced within recent years, forces us to acknowledge an incontrovertible fact that undergirds any honest conversation that we have about health disparities. And that fact is that racism is the most significant and pervasive cultural paradigm in the United States of America. Race and racism impact nearly every aspect of American life. And at its core, racism works in tandem with systems of inequality that permeate nearly every aspect of American life. There exists numerous examples of systemic inequalities that adversely impact child health. We can trace many of these inequalities directly to the health disparities that we see in children today. I believe the research shows that ACEs catalyze these unequal conditions to imperil child health. As has been stated before, the literature recognizes specific ACEs illustrated in this figure, compiled by NPRs Take the ACE quiz, with data from the CDC and the Robert Wood Johnson Foundation.

Dr. Ray Bignall: It is important, therefore, to realize that the ACE construct is uniquely distinguishable from the construct of social determinants of health, though there is certainly overlap with regards to their causes and effects. Today, a growing body of literature appreciates the impact of social drivers like systemic racism and inequality on ACEs. And that this impact is often mediated in children through the mechanism of toxic stress.



Now, I definitely don't have time to go through all of the social drivers that impact child health, but let's take a look at a handful to understand what our communities and our patients are really up against.

Dr. Ray Bignall:

I think it's important that we start with residential segregation. The history of which is brilliantly outlined in Richard Rothstein's 2017 bestseller, *The Color of Law*. Neighborhood segregation is the greatest driver of inequality that we see in America today, and one of the most vivid examples of structural racism in the 20th century. Central to this understanding is a debunking the myth of so-called de facto segregation, a recognition that communities across America, including those in the west Midwest and the Northeast were not segregated out of convenience or by culture, but by design and by law.

Dr. Ray Bignall:

As the federal government was seeking to bring Americans out of the mass poverty of the Great Depression, the ambitious and politically liberal policy agenda of Franklin Roosevelt's New Deal brought about policies to subsidize Americans home ownership. Still today, home ownership is the most significant wealth transfer between families and it affords families tremendous financial freedom that enables them to withstand financial mishaps that occur to all of us in life. The federal government provided these lifeline programs to millions of Americans, but Black Americans were explicitly excluded from this entitlement. With devastatingly surgical precision, the federal government's home owner's loan corporation used color-coded maps like this map of San Francisco to indicate which neighborhoods were worthy of federal investment. And it was those communities that were historically redlined that remained those disproportionately impoverished today. And those same communities, by the way, experienced decreased municipal investment, which results in many of the communities in which concentrated ACEs can be found.

Dr. Ray Bignall:

What about income? If we consider that home ownership is the primary vehicle of wealth transfer in the United States, and we discussed all the barriers faced by Black Americans and other minorities regarding home ownership, it should be no surprise that we see staggering wealth and income inequality in this country. Several structural barriers prevent wealth building among black communities here in the United States, including wage inequality and significantly higher unemployment rates. This means that black median family income in the United States is less

than 10 cents for every dollar of wealth accrued by a white family, a fact you can see depicted in this graph prepared by the Economic Policy Council. It's hard to pull oneself up by the bootstraps when you've after generation and generation been banned from entering the boot store. And we certainly can't talk about systemic inequality in America without also talking about policing. There is a long history of racial injustice in policing and incarceration practices that can be traced to the employment of law enforcement as kidnappers and enslavers of men, women, and children in the 18th and 19th centuries, and the use of police to enforce racial segregation and racial hegemony in communities across America in the 20th and 21st centuries. Consider the stark dichotomy of images of policing that we have seen in the last year and the differential treatment given to violence by White Americans versus Americans of color.

Dr. Ray Bignall:

The truth is unmistakable, communities in the United States are not policed the same and not all Americans feel served and protected. A growing body of literature explores the impact of police violence, policing practices, and mass incarceration on the health and wellbeing of children. And I encourage you to familiarize yourself with research from luminaries like Dr. Jacob Bor in Boston, or my friend, Dr. Nia Heard-Garris in Chicago, who have really begun to take a scholarly lens to this problem.

Dr. Ray Bignall:

For a brief moment, let's take a closer look at Dr. Heard-Garris study. In a nationally representative sample of children, she and her colleagues linked childhood history of parental incarceration or juvenile justice involvement to adverse mental health in early adulthood. She found that nearly one in 10 children had a history of parental incarceration. And one in 20 had a history of juvenile justice involvement. Specifically, exposure to both parental incarceration and juvenile justice involvement resulted in two times higher odds of anxiety, three times higher odds of depression, and three times higher odds of post-traumatic stress disorder.

Dr. Ray Bignall:

The web of systemic racism and ACEs and adverse child health painted by this study is truly staggering. So let's take a moment and practically define racism and understand how it fits in the constructs we'll be discussing today. This definition of racism, posited by world renowned physician and public health icon Dr. Camara Jones is my favorite. She defines racism as quote, "a system of structuring opportunity and

assigning value based on the social interpretation of how one looks, which is what we call race, that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources."

Dr. Ray Bignall:

So where is the convergence then between systemic racism, ACEs, and child health disparities? And how can we recognize it and document it in our scholarship, our leadership, and our practice? We often discuss health disparities in a vacuum without considering the complex and ubiquitous social factors that place our children at risk. I want to show you a couple papers as examples of how you can critically appraise health disparities research, to understand how these disparities intersect with ACEs and injustice. Of course, we'll use examples from pediatric nephrology because it's the best subspecialty in the world, but we'll also use an example from pediatric gastroenterology too. And I'm hoping that by using these two examples, we can learn a framework that can be applied to understanding the relationship between systemic inequality, ACEs, and health disparities, no matter what field of child health that you're in. Sound good? Well, let's get started.

Dr. Ray Bignall:

Step one. This framework involves us describing the systemic inequalities that help to explain the disparities that we see. Let's take a look at an example paper from a friend of mine, Dr. Michelle Star. She's a pediatric nephrologist at Riley Children's Hospital in Indianapolis, and she published this groundbreaking work to understand the impact of food insecurity on children living with kidney failure on dialysis. Food insecurity is both a symptom of inequality in the community and a driver of disparities that we see in health. And her research showed that while food insecurity affects about 20% of American households, it affects two thirds of children with end stage kidney disease in the cohort of patients she followed at Seattle Children's.

Dr. Ray Bignall:

So how can systemic inequalities interface with food insecurity and acute health care utilization that she described in her paper? We'll hear some examples. Housing status can impact the options that patients have for dialysis. Food insecurity, of course, is key to how we as nephrologists take care of kids with kidney failure, and it's linked to everything from growth impairment to an impact on transplant readiness.

Dr. Ray Bignall: The ability to purchase nutritious foods is incredibly challenging for those families that deal with income inequality. And of course, residential segregation and the historical legacy of red lining often correlates with food deserts that we see in our communities. Over policed neighborhoods are less desirable for investment and less likely to attract supermarkets or fresh food vendors. And healthcare utilization that is higher than normal in the context of kidney failure is a burden to the subsidized safety net programs that many of these patients rely on.

Dr. Ray Bignall: Let's consider another example, this time from pediatric liver transplantation, another area where racial health disparities exist. I want to hold up my friend and your fellow Californian, Dr. Sharad Wadhvani at Stanford and his paper, which was published last year in the American Journal of Transplantation. It's a case study in how to understand the impact of racism and systemic inequality on hard nosed healthcare outcomes. In this case, liver transplant survival.

Dr. Ray Bignall: This brilliantly designed analysis by my friend and former co-fellow links racial disparities and allograft outcomes to a construct known as adverse neighborhood characteristics called neighborhood deprivation. The neighborhood deprivation score takes into account the fraction of the population that lives below the poverty line, the amount of people who live on public assistance, those who are able to achieve a high school diploma, those individuals who don't have any health insurance and housing units that are vacant within the community, as well as median household income. Here, we see that black children who undergo liver transplant have a 41% increased hazard of graft failure in the first 10 years post-transplant, compared to their white counterparts. And for each 0.1 degree increase in neighborhood deprivation, all children experience a 12% increased hazard of graft failure and a 13% increased hazard of death.

Dr. Ray Bignall: And why should we care about the impact that neighborhood deprivation and structural racism can have on allograft outcomes and liver transplant? Well, because economic inequality deprives these communities from the ability to build and transfer wealth that will enable them to weather health crises like childhood liver transplant. The legacy of redlining, once again, puts an insurmountable downward pressure on economic viability for these neighborhoods. Communities with high neighborhood deprivation scores are also more likely to have unclean air,



water, and soil. And over policed neighborhoods are less likely to receive municipal investment and development.

Dr. Ray Bignall:

So step two, you should describe the ACEs that catalyze these disparities and imperil child health, because they're linked to these social determinants of health. So let's take a look back at my friend, Dr. Star's paper. That's the one about kidney failure in kids with food insecurity and consider some ways that ACEs directly interrelate with them this work. For example, insecure housing can leave many families, including children at risk for physical, emotional, or sexual abuse. Tenuous financial circumstances may leave children at risk for abuse and physical neglect as well. Increased carceral and law enforcement exposures contribute to adverse child mental health. And finally, the accumulation of ACEs contribute directly to poor health outcomes and increased healthcare utilization that we see in this population.

Dr. Ray Bignall:

How about my friend, Dr. Wadhvani's paper? Well, similarly, income inequality can result in under-insured employed status that places individuals at risk for substance abuse and spousal discord. The legacy of red lining once again includes neighborhoods now that are at greater risk of exposure to substance abuse. And increased carceral and law enforcement exposures also adversely impact child mental health, like we've discussed previously. Finally, step three, consider the steps to care for our patients and children in our community through this lens, a lens of systemic racism, inequality, and ACEs.

Dr. Ray Bignall:

I have suggested a few possible solutions for us. First, we should be willing to exercise empathy and extra effort on behalf of children and families at greatest risk due to ACEs and systemic inequality. You know, sometimes as a pediatric nephrologist, in order to take the best care of my patients, it's my responsibility to take care of more than just their kidneys. I've got to also be thinking about their mental health. I've got to be thinking about their family's ability to weather the financial circumstances that surround their kidney health. And I've also got to be thinking about the lived environment that could be contributing to their illness. Number two, we should screen for ACEs and social determinants of health in our child health encounters. This sounds simple, but it can be particularly challenging in large health systems and small health systems alike. Many institutions thankfully today have started to incorporate this into their normal processes and the electronic health record. But it's also

important that we have a plan for what to do when patients test positive for these screens. Number three, we've got to support primary prevention strategies through public health policy. I would encourage you to take a look at the Surgeon General's outline, where the office describes some of the primary prevention strategies that can be championed by all of us through public health policy. Advocacy is our lane, and that includes things like paid family, leave high quality education for all children, and access to healthcare, not just for kids, but for their parents and caregivers as well.

Dr. Ray Bignall:

Number four, we should be comfortable integrating psychologists and mental health providers into physical health settings. They can be immeasurably valuable in both primary and subspecialty care settings and are trained to teach patients coping strategies and mindfulness techniques to help improve mental health and wellbeing when they face ACEs in their daily life. Finally, building robust longitudinal and authentic community partnerships-

Dr. Ray Bignall:

Longitudinal and authentic community partnerships. That's key. We've got to resist the urge to colonize marginalized and minoritized populations, especially those experiencing the burden of health disparities and ACEs. Instead of trying to lord solutions over communities, we should be investing in grassroots partnerships, money, time, and energy, and allowing communities to develop their own solutions that we can support through those mechanisms to improve the conditions and lived experiences of children and families who live there. Thank you so much for the opportunity to talk to you today. It's been a true honor and a pleasure, and I look forward to hearing from you all in the question and answer period.

Dr. Roy Wade:

So in Philadelphia we chose to replicate the Adverse Childhood Experience study to look at the impact that these experiences amongst more racially and economically diverse populations. What we found was that many of the Adverse Childhood Experiences were more common in economically distressed urban settings. We found that many of the broader experiences of adversity were also strongly associated with life course health outcomes. In addition, we found certain populations that are at higher risk for Adverse Childhood Experiences and significant adversity, including males, African-Americans, and individuals living in poverty. We also found that Adverse Childhood Experiences could explain

black/white differences in health outcomes. So in summary, our study suggests we should broaden our understanding of childhood adversity and that urban economically stressed populations are particularly high risk for childhood trauma and chronic stress.

Dr. Roy Wade:

Next, what I'd like to do is talk about strategies to address racism and toxic stress. First, parenting programs, such as home visiting services and parent child interaction therapy have become evidence-based approaches to address adversity within homes and communities. For individuals who have depression and experiences of trauma, trauma focused cognitive behavioral therapy has become the staple of care. But emerging approaches to addressing toxic stress include things like mindfulness training and strategies and approaches to improve things like organizational skills and the ability to plan and regulate your emotions. In pediatric primary care, there are several ACE informed approaches to addressing diversity amongst your patient population, including things like routine assessment for exposure to risk factors for Adverse Childhood Experiences or Adverse Childhood Experiences themselves. This approach increases awareness around the adversity that your patients are experiencing and allows you to target and tailor services to high risk populations.

Dr. Roy Wade:

Developing trauma informed anticipatory guidance to provide to parents to talk to their kids about the impact of trauma and to help them to be more nurturing and supportive for their kids. Promoting awareness amongst your patients and their families and your community about the impact of trauma on health and their wellbeing. Collaboration with community-based programs that provide services that help to mitigate the impact of trauma. Training providers on how to respond to patients who have experienced trauma and to help them to connect to resources and services that improve outcomes for them. Guidance in terms of clinical decision-making, in terms of identifying individuals at high risk for poor outcomes, and in targeting and tailoring services for these individuals. And in strategies for reimbursement for trauma assessment and trauma interventions using coding and billing practices.

Dr. Roy Wade:

But it's also important to have a knowledge of the life experiences of your patients and understanding the adversity that they have experienced. I call it ACEs knowing. Just stopping and understanding allows you to develop trauma informed approaches such as morning huddles to

anticipate needs, to identify patients who might need more services and support, and provide flexibility in your scheduling to have additional time to help these patients with their needs. Recognizing the vicarious impact of trauma and having self care services and programs to support staff who have experienced trauma themselves, or have heard about or witnessed the trauma that their patients have experienced. Also having an understanding of the adversity that your patients have experienced helps you to help your patients rewrite their narrative.

Dr. Roy Wade:

Many patients, as a result of not talking about these experiences, begin to internalize them and blame themselves for having the experiences at all. As a provider you can communicate to patients about the association between Adverse Childhood Experiences and other health outcomes, but also talk with them and let them know that they did not deserve these experiences, and truthfully help them to rewrite their narrative and moving forward to heal from their traumatic experiences. Also, it gives you the opportunity to help patients to build emotional control, identify triggers, and learn to use things like mindfulness and exercise to improve their health. And then as I alluded to before, it allows you to develop collaborative care plans with either integrated services or community-based organizations that directly address the impact of trauma on patients.

Dr. Roy Wade:

Now I'd like to close by talking about strategies that providers can use to talk about the impact of historical racism and trauma with their patients. First off, I think it's important to recognize that it's the elephant in the room. We all know it's there. So I think it's important to name it and identify it with your patients and acknowledge the long-term impact that it has on their health and wellbeing, and it may have on their kids' future wellbeing. And then, as you think about services and programs and the ways to structure your practice and provide care for patients, incorporate this knowledge into every aspect of what you do, an understanding of how historical racism and how trauma may impact your patient's willingness to receive vaccinations or certain services, how it impacts their wellbeing as they leave your clinic and access to other services and resources, and how it impacts the way they relate to you and other organizations and other individuals within their community. Long-term thinking about ways to help and promote healing, particularly from ongoing racial trauma and racial stress by providing resources and services, by collaborating with community based organizations within

your community that are working actively to address these issues, and advocating on the local, state, and national level for programs and services that decrease exposure to racism and trauma amongst children and families. Thank you.

Jennifer Ryan: Thank you so much for those thought provoking presentations. Now we'll address a couple of audience questions. Our first question for this group is from Yarin and she asks, "How do we recognize the presence of environmental racism in our communities and take action to protect their environmental health and wellbeing?" Let's go to Dr. Bignall.

Dr. Ray Bignall: Look, we don't have to go too far back in our history to find a great example of the impact of environmental injustice on child health. Take, for example, the one that's chronicled in the book right over my shoulder, on my display case there, the work of my colleague in pediatrics, Dr. Mona Hanna-Attisha. Her book, entitled *What The Eyes Don't See*, chronicles her experience as a pediatrician uncovering the Flint water crisis. In this case, a municipal decision with regards to the natural environment, the water that was coming into the city of Flint from the Flint River, met with the built environment, the lead lined infrastructure of pipes that fed the city of Flint, Michigan, and the confluence of these two issues, pardon the pun, resulted in a true injustice being meted upon the children and families in the Flint, Michigan community. These kids were then exposed to leaded water, water that was contaminated with lead that leached out of those pipes because of the inappropriate and inadequate treatment of the water that was coming from Flint, Michigan. From the Flint River, rather, in Flint, Michigan.

Dr. Ray Bignall: So a real challenge in this community that they are still dealing with many, many years after it was first discovered. And an example of how municipal decisions can adversely impact communities at the margin. Certainly not only has this resulted in devastating physical effects for children, but it's also contributed to the toxic stress experienced by children and families in this community, and certainly can exacerbate ACEs, particularly when you think of the mental health impacts of lead in water and lead ingestion that children can experience. But also we've got to address these issues through public policy, robust public policy. And I am absolutely thrilled to engage with colleagues who are interested in doing this work in the future.

- Jennifer Ryan: Thank you for that response. Next is a question from Scott. He asks, "Are there interventions we can recommend to families to help buffer the toxic effects of racism and discrimination?" Let's go to Dr. Wade.
- Dr. Roy Wade: So in thinking about strategies to buffer or mitigate the impact of racism and discrimination on children, we want to harken back to the central idea that what we know is that anyone, and we know this from anecdotal and empirical research, of the importance of a consistent relationship with a consistent and caring adult in buffering or mitigating the impact of toxic stress on kids. It's the same here. Everyone has a role to play in helping kids to overcome the impact of racism and discrimination, and any adult who wants to be consistent in caring in the lives of young children who have experienced racial trauma and racial stress can help them to overcome these experiences.
- Dr. Roy Wade: But I also want to focus on the primary role of parents and talk about the concept of racial socialization. This is the practice by which parents help to help their kids to understand racial discrimination and to develop coping strategies to deal with those experiences as they get older and go out into the world. Studies that have looked at the impact of racial socialization have shown that when parents do an effective job of helping their kids develop these coping strategies, that as young adults and teenagers, these kids are less likely to have depression and anxiety and other symptoms that are associated with their exposure to racial discrimination and racial trauma. However, sometimes the parents' ability to provide or help their kids build these coping strategies may be impaired by their own experience of racial discrimination and trauma.
- Dr. Roy Wade: So as pediatric providers, we have a role to play in helping parents to build those skills that help them to talk to their kids about racial discrimination and help their kids to develop those strategies. So we should feel comfortable talking about racial discrimination and events ongoing in our community and across our nation with our children and families, and we should help parents in terms of building the awareness around how racial discrimination increases the likelihood that kids will be exposed to toxic stress and support parents and their primary role in helping their kids respond to these events and develop the coping skills they need to overcome them.



Jennifer Ryan:

And that's all the time we have for today. Thank you to our speakers and audience members who submitted questions in advance. As we wrap up, I want to remind everyone about the free two hour Becoming ACEs Aware training that covers the science of ACEs and toxic stress, how to screen for ACEs, and how to implement trauma-informed care. We encourage Medi-Cal providers to submit their out of station after completing this training and to sign up to be part of our ACEs Aware clinical directory. More information, links to our training site, attestation form, and the directory are all available on [acesaware.org](https://acesaware.org). I want to thank you once again to all of our incredible speakers for generously sharing their expertise and time with us. A recording of this webinar will be available and emailed to all attendees and posted on our website later today. Please be sure to share with any colleagues or others in your network who may be interested. Thank you again for joining us today.