NATURE AND HEALTH

EMERGING KNOWLEDGE INFORMS NEW POLICY DIRECTIONS

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Justice in access to the outdoors

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Abstract

Nature is an established social determinant of health with clear benefits to physical, mental, and social health, yet it continues to be used as a setting for violence against Black, Indigenous, and people of color (BIPOC).¹ The right to be physically active outdoors, to play, and to gather in community is essential for health and well-being, and as such, the ongoing incidents of violence outdoors have the potential to widen the health disparities gap. While the movement to bring nature and health together has gained traction, this movement cannot succeed unless violence against communities of color outdoors ends. Health professional organizations who have been vocal about the impact of racism on health need to take measures to ensure safe access for all is prioritized and achieved in the outdoors. We offer a set of recommendations for health professionals and health organizations to enact measures that that ensure our work is better justice-aligned in nature.

Introduction

Access to nature is an established social determinant of health with clear benefits to physical, mental, and social health,² yet it can be used as a setting for violence for communities of color, such as Black Americans. We have seen a bird watcher, Christian Cooper, threatened with police action; we have seen a jogger, Ahmad Aubery, hunted and killed without cause; we have heard allegations of lynching when Black people have been found hanging from trees. We have

remembered when Tamir Rice was killed while playing in a park, while Trayvon Martin, and others, were killed for nothing other than being out of doors. While pronounced in the Black community, other communities of color have also been excluded from and experienced violence in public spaces. We have seen police called on Black and Hispanic³ men for being at a marina⁴ and a mother and daughter attacked for speaking Spanish while walking home.⁵ Muslim men were attacked while

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praying in a park; ⁶ a 15-year-old Muslim boy died after a man who had been taunting his community with anti-Muslim hate speech for weeks drove a car into him as he walked down the street. ⁷ We know the long history of lands being violently ripped from Indigenous people. And we have remembered the history of violence that has faced Black, Indigenous, and people of color (BIPOC) in the outdoors.

In the context of the current COVID-19 pandemic, these tragedies are all the more distressing. The right to be physically active outdoors, to play, and to gather in parks as community is essential for health—especially during a pandemic. Exercising outdoors, in and around nature, results in added mental health benefits, stress relief, and reduced mortality over the course of life as compared to exercise that happens indoors.⁸ Access to the

Audrey Peterman | BLACK JOY COLLAGE BY JÓSE GONZÁLEZ





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outdoors can mitigate the transmission of SARS-CoV-2.9 "Stay at home" orders, including park closures and restricted park access, have impeded access to nature, which may be most needed by those of at highest risk for COVID.

Despite this, for those of us in medicine and public health, the reality that a Black American is exponentially more likely to be killed outdoors than a white American calls into question the recommendation to Black Americans to be physically active outdoors. Health professions are guided by ethics and a code of conduct.

Medical schools and schools of public health have long promoted healthcare ethics with the goal of improving outcomes. The four principles of healthcare ethics that are embraced across disciplines are (1) *non-maleficence*—do not inflict harm; (2) *beneficence*—do what is in the best interest of the person; (3) *autonomy*—respect self-determination; and (4) *justice*—equitably distribute benefits, risks, costs, and resources. These principles existed in the morality of our society long before ethicists ascribed them to healthcare; however, our current social climate requires that we look at these principles through a new lens with

respect to social determinants of health. Social determinants of health are factors outside the clinic walls—in the places where we live, work, and play—that impact health. These non-clinical social determinants of health are predictive of health outcomes, and sadly, reflective of disparities at the heart of our society.

And while recent events have brought into sharp focus the unjust and unfair inequities that impact BIPOC in the outdoors, unaddressed structural violence and racism are sequelae of injustices that have had negative impacts on health for a long time. The racism and structural violence that prevents outdoor recreation has resulted in decades of health inequities. As an example, during the era of segregation, Black Americans were denied access to swimming pools. This history of discrimination and segregation has contributed to inequity in who knows how to swim and, consequently, in drowning risks. According to the CDC, the fatal drowning rate of Black children

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> As members of families and in friendships, nature can help heal interpersonal issues, as time in nature strengthens relationships between children and caregivers, and relationships between friends

aged 5–14 is three times that of white children. Rates for American Indians, Alaska Natives, and Pacific Islanders (the Indigenous American communities represented in this study) have been recorded as twice the rate of whites. ¹³ There are myriad examples of ways in which failure to redress structural violence and racism in outdoor recreation have health consequences.

While our clinical mandate recommends getting outdoors for health, as community members, we know that the call to spend time outdoors for health is not possible as long as we do not feel safe for our very lives outdoors.

A road map for health professionals to mandate justice in nature

Professional organizations have been vocal about the impact of racism on BIPOC. The trustees of the American Medical Association pledged action against racism¹⁴ and the American Public Health Association declared that racism is an attack on mental and physical health.¹⁵ But we believe they have not gone far enough when it comes to addressing our right to outdoors for health. We call on the American Medical Association and American Public Health Association to make a clear demand for safe, racism-free access to nature as a public health imperative. We recommend the following actions.

In addition to adopting a moral position against racism, health organizations should take active measures to eradicate the impacts of racism on health: in other words, to heal. Being in nature can be part of the solution.

In the past decade, there has been an increase in the number of studies on the role that nature programs can play to reverse and heal the effects of trauma on our brains and bodies. With the realization that outdoor recreation may

be contributing to that trauma for BIPOC, it requires walking a fine line to also articulate how those experiences can be healing. Ideally, nature programs that provide racism-free spaces of joy have the potential to help heal trauma and to build resiliency skills.

Nature has the potential to help individuals heal from trauma through stress relief, increased physical activity, access to fresh air and sunshine, and by building resilience. As members of families and in friendships, nature can help heal interpersonal issues, as time in nature strengthens relationships between children and caregivers, and relationships between friends. At the community level, nature-based solutions have been emerging, and are needed, in light of the ongoing and increasing work against racial injustice.

Early on, the Black Lives Matter movement developed a Healing Justice Toolkit to "ensure that our direct actions are centered on healing justice." This is important given pervasive and systemic trauma not just inflicted on communities of color, but that may also be perpetuated through actions in resistance. This also complements other work around "community healing and healing justice" both in the academic and research space, but which still connects to the value and strength of community networks. One example is oft-cited "peer-to-peer support" models, which can manifest and operationalize in different ways, for example through the Promotora Model. Based on that, there are examples of using it to support and foster connection to and healing in nature.¹⁶

These community-based healing efforts have also articulated that it is helpful to move from "trauma informed" to "healing centered" approaches to healthcare. In the field, we see this captured in the 2019 Aspen Institute Report "Scan of the Field of Healing Centered Organizing," which also



Lesford Duncan. Running joy | COLLAGE BY JÓSE GONZÁLEZ

connects to early work on "healing justice" by the Kindred Healing Justice Collective in 2006. The idea is to provide a "framework to identify how we can holistically respond to and intervene on generational trauma and violence."

Healthcare providers and health systems should work to increase nature access.

Given that nature is a tool to address deeply entrenched health disparities, healthcare providers and health systems should work to equalize access to nature, as they have with other social determinants of health. Access to the outdoors, and to nature, is not presently equitably distributed in the United States. Persons at the highest need are often those with the least access to nature. For example, low-income and BIPOC communities are over three times more likely to live in nature-deprived neighborhoods than whites.¹⁷ These areas often have less tree cover and fewer parks near residents' homes.¹⁸ While affluent populations have access to the nature found in their own yards and/ or in neighborhood parks nearby, low-income populations are less likely to.^{19,20} This stems from a history of deliberate discriminatory policies, such as redlining, that have exacerbated unequal

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access to nature and increased health disparities.²¹ Unequal access is a more powerful determinant of health while Covid-related sheltering-in-place orders and park and gym closures continue.

Because BIPOC populations may have the most to benefit from a park prescription program, these programs should be informed by community assessments of parks to determine those that are acceptable and socially accessible to families instead of simply recommending those which are closest. In fact, in the urban context, proximity barriers are not the only ones; reduced "social access" to parks can result from issues of safety, maintenance, and walkability, or the exclusion perceived by some minorities. ²² Some studies suggest that social access is more important than proximity in understanding whether residents in a low-resource neighborhood use a park.

Physical inactivity is one of the factors contributing to disproportionate disease rates in BIPOC communities. Programs encouraging healthy, outdoor, and active living need to acknowledge and account for current and historical systemic barriers to it. Researchers have shown that outdoor physical activity is associated with knowing your neighbors, a feeling of safety, and neighborhood racial identity. Perceived racism is inversely related to physical activity in general as well as with spending time outdoors in nature.²³ Perceptions of social cohesion enhanced participants' physical activity.24 Yet, to date, much of the research around nature and health has focused on individual behavior or onetime nature experiences. For nature prescription programs to work, stakeholders must demand that nature be a safe, a racism-free space.

Healthcare organizations must also acknowledge that racism occurs in the outdoors irrespective of income. While BIPOC may be over-represented in low-income populations, there are barriers to the outdoors for many higher-income non-white populations that need to be addressed in order for healing to occur.

Healthcare organizations should identify parts of nature that are traumatizing and support work to mitigate that effect.

We need alignment between how health systems talk about nature and how Indigenous communities experience nature.

Access to nature is more than simply creating space for people to stand in parks. Medicine and public health organizations need to acknowledge that you cannot truly enjoy nature when you are not allowed to own your presence in it, have your role in it valued, play and recharge in it in culturally relevant ways. The healing that happens when we are in nature developed within distinct cultures and community. We will need to acknowledge that to heal the traumas we have experienced in losing our connections to land and culture. Alignment is needed between how health systems talk about nature and how Indigenous communities experience nature in kincentric or spiritual terms.

One example of a missed opportunity to understand the breadth of nature's role in healing is the way nature is predominantly considered in schools exclusively within the "natural sciences"—for example, under the framing of ecology and natural resources. While these lenses are important, if our goal is true healing, we need to acknowledge that the human relationship with nature throughout history exceeds what is described in natural science models.

In many cultures, relationships with plants, animals, and biodiversity were conceived of as part of family or religion. That is a very different framing than the conversations we currently have about spending time in nature for our personal physical and mental health. Nature, and gathering outdoors, are already fundamental to how many BIPOC cultures celebrate life and heal. Whether it is Juneteenth celebrations in the Black community, family picnics in the Latinx community, Spring New Year's celebrations in Middle Eastern

communities, or Indigenous healing practices in nature, the outdoors is how we as a human community have always healed. If we move toward nature as a relationship beyond the current dominant framing of mechanistic reductionism, we may find the topic resonates more with community and healing.

Rather than create programming for people, the nature and health community should partner with BIPOC-led community-based organizations and

programs for equitable co-creation of applicable studies and program design. We should start the process with a genuine curiosity of what is already known in BIPOC communities about nature and healing. That will require listening and a willingness to increase understanding of how different communities wish to interact with nature. Attending to existing practices may lead to unexpected realizations, such as that eating together in nature may be the most effective way to gather people, or that programming is more

Culturally Natural | COLLAGE BY JÓSE GONZÁLEZ



> If we are to genuinely understand and promote the role of nature in healing, we need to shift the way we address and research this topic from a deficit model to a strength model

effective if it is multigenerational and does not extract youth from their families.

Move from a deficit to a strength model.

The common notion that BIPOC populations are more distanced from nature than whites and need to be reconnected with nature needs to be challenged and, we propose, discarded. We have yet to see evidence that low access to nature equates with low desire or a lack of collective memory in a community of how to heal in nature. In fact, our work suggest that racial and ethnic minority populations can benefit from park prescriptions, even if they are not using parks at baseline.²⁵ Likewise, research showing that urban populations of color may have fears about or constraints on spending time in nature should not be taken to mean that those groups may not desire or benefit from nature-based interventions.

If we are to genuinely understand and promote the role of nature in healing, we need to shift the way we address and research this topic from a *deficit* model to a strength model. The person-centered, asset-based models that we promote in other healthcare contexts require us to make the shift from calculating deficits to assessing strengths in this context. Measurements of health can include positive outcomes, and not just a lack of negative outcomes. We need to establish methods to measure and capture community joy, healing, and resilience, in addition to addressing the negative outcomes stemming from the struggles we face.26 Using asset-based approaches from other health promotion efforts can provide a framework as well as guidance on how to measure and evaluate the effectiveness our interventions. Key to this will be allowing the impacted communities to drive the innovations,²⁷ giving deference to communities by letting them lead these efforts, acknowledging their collective knowledge, and harnessing their skills, resources, and talents.28

Conclusion

The global experience of the COVID-19 pandemic demonstrates how important it is to be able to spend time in nature. We need a path towards ensuring that nature is meaningfully accessible for all individuals and community health and healing work. As the evidence mounts of nature's role as a community-based resource for relieving toxic stress, it is crucial for the medical and public health community recognize and address the structural racism underlying inequities in nature access, and the community-specific uses of nature for mental and physical health. Here, we have offered actionable starting points to redress inequities that have prevented us from realizing social justice.

Endnotes

- In this paper we will use the term BIPOC in reference to a common non-white appellation. While the intent is to honor inclusivity, we recognize there is still current debate on its use and no fully agreed upon term. We also recognize the importance and need of specificity in reference to particular communities, as well as when a term is codified in policy, which is part of the debate on the use of "BIPOC."
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