



American Association of  
NURSE ANESTHESIOLOGY

## **The CRNA's Role in Addressing Racial and Ethnic Disparities in Anesthesia Care**

*Position Statement, Policy and Practice Considerations*

### **Purpose**

The American Association of Nurse Anesthesiology (AANA) believes that it is imperative for Certified Registered Nurse Anesthetists (CRNAs) to provide compassionate, holistic, patient-centered anesthesia, pain management, and related care regardless of the patient's race or ethnicity.

The purpose of this document is to highlight the impact of racial and ethnic disparities on outcomes of care and provide resources for CRNAs and facilities to develop effective policies and practices that promote equitable care for all patients.

### **Background**

Despite advances in healthcare and technology that have tremendously improved population health, significant healthcare disparities resulting from social, economic, and environmental disadvantages continue to disproportionately affect racial and ethnic minorities in the United States. Compared to the general population, members of racial and ethnic minority groups experience greater obstacles to health insurance and access to services, which may result in worse health outcomes.<sup>1</sup>

These disparities also exist in anesthesia care. For example, studies show compared to white women, racial and ethnic minority women are less likely to receive epidural analgesia for labor,<sup>2</sup> and are more likely to undergo unscheduled cesarean delivery.<sup>3</sup> Racial and ethnic minority women are also two to three times more likely to die from pregnancy-related causes than white women.<sup>4</sup> A longitudinal study (1999-2002) of women who underwent cesarean delivery found black women are significantly more likely to receive general anesthesia compared with white women.<sup>5</sup> This finding is important because of the inherent increased risk when anesthesia is provided during cesarean delivery and the decreased benefit available to the mother for immediate bonding and awareness/recall of the birth.

Racial and ethnic minorities also receive less comprehensive treatment options for acute and chronic pain compared to whites.<sup>6,7</sup> Additionally, black children diagnosed with appendicitis in the emergency department are less likely to receive pain medication for moderate pain and less likely to receive opioids for severe pain compared to white children.<sup>8</sup> Research suggests a healthcare professional's false beliefs about biological differences between blacks and whites (e.g., a false belief that whites are more sensitive to pain as compared to blacks) may contribute to disparities in pain assessment and treatment recommendations.<sup>9,10</sup>

In addition to hereditary and modifiable risk factors, social determinants, such as an individual's living environment can impact health outcomes.<sup>11,12</sup> For example, racial and ethnic minorities who are disproportionately poor live in unstable housing with limited transportation and access to health-enhancing resources, such as healthy foods, exercise facilities, and preventative care.<sup>13,14</sup> A long-standing distrust of the healthcare system due to the legacy of racism where experimental treatments and tests were conducted on minority patients without their consent or knowledge; language barriers; low health literacy; and lack of insurance and paid sick leave

may also contribute to their inability to receive quality care.<sup>15-21</sup> Research suggests disparities transpire throughout the life course, starting before birth and continuing through mid-life, old age, and across generations.<sup>22</sup>

As the diversity of the U.S. population increases, the societal cost of healthcare disparities is increasing. Recent analysis suggests consequences of disparities annually add approximately \$93 billion to healthcare costs and \$42 billion in lost productivity, as well as cause significant economic loss due to premature deaths.<sup>23</sup> The American Public Health Association reported that 145 cities and counties across 27 states recently declared racism as a public health issue compared to only seven states that made these declarations in 2019.<sup>24</sup>

## Policy and Practice Considerations

CRNAs have an important role in understanding and recognizing healthcare disparities to effectively address patients' needs from diverse racial and ethnic backgrounds. Eliminating these disparities is challenging and requires a multifaceted approach by both CRNAs and facilities. Key aspects are outlined below:

- **Be a patient advocate:** CRNAs should advocate for their patients who experience racism or other instances of injustice while receiving care.
- **Be consciously aware of one's own implicit bias:**<sup>25</sup> CRNAs should be aware of their own implicit bias or unconscious prejudice because of its adverse impact on patient-CRNA interaction, and ultimately, patient's health outcomes. For example, some healthcare professionals may choose not to engage in a meaningful discussion of healthcare options with the patient due to their preconceived notion that the patient has limited health literacy to fully understand those options.
- **Embrace cultural humility as a life-long process:**<sup>26,27</sup> Cultural humility refers to “a process of openness, self-awareness, being egoless, and incorporating self-reflection and critique after willingly interacting with diverse individuals.”<sup>26</sup> Embracing cultural humility has many benefits, as it promotes “mutual empowerment, respect, partnerships, optimal care, and lifelong learning” that helps, in turn, build a better environment and tools to work with diverse patients, families and communities.<sup>26,27</sup>
- **Be aware of the community needs.**<sup>25</sup> CRNAs are encouraged to better understand the communities they serve, the needs of those communities, and whether resources are available to address those needs. CRNAs may collaborate with social workers, when appropriate, to provide or refer patients to resources (e.g., sharing resources related to transportation options to get to the clinic/hospital for anesthesia follow-up or pre-op check).
- **Accommodate literacy needs and linguistic barriers of patients:**<sup>28</sup> Patients from racial and ethnic backgrounds are more likely than other groups to experience limited health literacy and English proficiency potentially restricting their ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions.<sup>28</sup> The AANA resource, *Informed Consent for Anesthesia Care*, includes practical recommendations on how to effectively facilitate communication with patients from diverse backgrounds.
- **Incorporate educational training on cultural competency into practice:**<sup>25</sup> Cultural competency education/training is essential to help CRNAs and other providers acknowledge their own biases as well as understand the dangers of racism and discrimination in healthcare. Education training should be evidence-based and taught in a non-judgmental way. It should include recommendations on how to empower patients

from disadvantaged backgrounds to understand their options for anesthesia and pain management care, as well as financial and social supports.

- **Collect health outcomes data:**<sup>29</sup> Facilities should systematically collect data on health outcomes that include: information on race/ethnicity, income, insurance status, age, severity of health condition(s), and other essential patient characteristics.
- **Develop, implement and maintain anti-racist/anti-discrimination policies at your facility:**<sup>30-32</sup> Organizations and facilities must develop, implement, and maintain policies to address racism and discrimination.
- **Utilize evidence-based protocols when possible to provide patients with anesthesia and pain management care:**<sup>33</sup> CRNAs should consider using clinical guidelines, standardized checklists, and facility-wide protocols to help reduce bias that may influence anesthesia and pain management decisions.
- **Encourage students from culturally diverse backgrounds to consider the nurse anesthesiology profession:**<sup>34-36</sup> Nurse anesthesia educational programs should consider strategies to attract and retain students from culturally diverse backgrounds. Research shows minority healthcare professionals are more likely to provide care to minority patients and work in underserved areas.<sup>37</sup> There is also limited evidence to suggest that patients who share the same racial or ethnic background with their healthcare professional report higher levels of satisfaction with care.<sup>38,39</sup> More research is needed to explore this relationship further.

## Conclusion

Eliminating disparities in healthcare remains a critical public health priority. CRNAs can play an important role in reducing these disparities to effectively address patients' needs from diverse racial and ethnic backgrounds.

## Glossary

**Anti-racism:** “[An] active process of identifying and eliminating racism by changing systems, organizational structures, policies and practices, and attitudes, so that power is redistributed and shared equitably.”<sup>40</sup>

**Cultural Awareness:** “Being cognizant, observant, and conscious of similarities and differences among and between cultural groups.”<sup>41</sup>

**Cultural Competence:** “Is the ability to collaborate effectively with individuals from different cultures; and such competence improves health care experiences and outcomes.”<sup>42</sup>

**Cultural Humility:** “A process of openness, self-awareness, being egoless, and incorporating self-reflection and critique after willingly interacting with diverse individuals.”<sup>26</sup>

**Discrimination:** “The unfair or prejudicial treatment of people and groups based on characteristics such as race, gender, age or sexual orientation.”<sup>31</sup>

**Diversity:** “Understanding the background of employees and patients being served, including culture, gender, sexual orientation, religious beliefs, and socioeconomic status. Also, hiring and retaining a workforce that is representative of the patient population served.”<sup>43</sup>

**Health Disparity:** “[A] higher burden of illness, injury, disability, or mortality experienced by one group relative to another.”<sup>23</sup>

**Healthcare Disparity:** “[D]ifferences between groups in health insurance coverage, access to and use of care, and quality of care. Health and [healthcare] disparities often refer to differences that are not explained by variations in health needs, patient preferences, or treatment recommendations and are closely linked with social, economic, and/or environmental disadvantage. The terms ‘health inequality’ and ‘inequity’ also are used to refer to disparities.”<sup>23</sup>

**Health Equity:** “Striving to equalize opportunities to be healthy. In accord with the other ethical principles of beneficence (doing good) and nonmaleficence (doing no harm), equity requires concerted effort to achieve more rapid improvements among those who were worse off to start, within an overall strategy to improve everyone's health. Closing health gaps by worsening advantaged groups' health is not a way to achieve equity. Reductions in health disparities (by improving the health of the socially disadvantaged) are the metric by which progress toward health equity is measured.”<sup>44</sup>

**Inclusion:** “Giving both employees and patients a voice to help provide/receive high-quality care, and encouraging the presence of a diverse healthcare staff in the treatment experience of patients.”<sup>43</sup>

## References

1. Riley WJ. Health disparities: gaps in access, quality and affordability of medical care. *Trans Am Clin Climatol Assoc.* 2012;123:167-172; discussion 172-164.
2. Glance LG, Wissler R, Glantz C, Osler TM, Mukamel DB, Dick AW. Racial differences in the use of epidural analgesia for labor. *Anesthesiology.* 2007;106(1):19-25; discussion 16-18.
3. Edmonds JK, Yehezkel R, Liao X, Moore Simas TA. Racial and ethnic differences in primary, unscheduled cesarean deliveries among low-risk primiparous women at an academic medical center: a retrospective cohort study. *BMC Pregnancy Childbirth.* 2013;13:168.
4. Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths. 2019; <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>. Accessed January 26, 2021.
5. Butwick AJ, Blumenfeld YJ, Brookfield KF, Nelson LM, Weiniger CF. Racial and Ethnic Disparities in Mode of Anesthesia for Cesarean Delivery. *Anesth Analg.* 2016;122(2):472-479.
6. Mossey JM. Defining racial and ethnic disparities in pain management. *Clin Orthop Relat Res.* 2011;469(7):1859-1870.
7. Carey TS, Garrett JM. The relation of race to outcomes and the use of healthcare services for acute low back pain. *Spine (Phila Pa 1976).* 2003;28(4):390-394.
8. Goyal MK, Kuppermann N, Cleary SD, Teach SJ, Chamberlain JM. Racial Disparities in Pain Management of Children With Appendicitis in Emergency Departments. *JAMA Pediatr.* 2015;169(11):996-1002.
9. Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proc Natl Acad Sci U S A.* 2016;113(16):4296-4301.
10. Hollingshead NA, Meints SM, Miller MM, Robinson ME, Hirsh AT. A comparison of race-related pain stereotypes held by White and Black individuals. *J Appl Soc Psychol.* 2016;46(12):718-723.
11. Van Kalsbeek M, Saunders JB. Healthy People 2020: a road map for health. *NCSL Legisbrief.* 2011;19(27):1-2.
12. Koh HK, Piotrowski JJ, Kumanyika S, Fielding JE. Healthy people: a 2020 vision for the social determinants approach. *Health Educ Behav.* 2011;38(6):551-557.
13. Jacobs DE. Environmental health disparities in housing. *Am J Public Health.* 2011;101 Suppl 1:S115-122.
14. Hernandez D. Affording Housing at the Expense of Health: Exploring the Housing and Neighborhood Strategies of Poor Families. *J Fam Issues.* 2016;37(7):921-946.
15. Stepanikova I, Cook KS. Effects of poverty and lack of insurance on perceptions of racial and ethnic bias in health care. *Health Serv Res.* 2008;43(3):915-930.

16. Sohn H. Racial and Ethnic Disparities in Health Insurance Coverage: Dynamics of Gaining and Losing Coverage over the Life-Course. *Popul Res Policy Rev.* 2017;36(2):181-201.
17. Green AR, Nze C. Language-Based Inequity in Health Care: Who Is the "Poor Historian"? *AMA J Ethics.* 2017;19(3):263-271.
18. DeRigne L, Stoddard-Dare P, Quinn L. Workers Without Paid Sick Leave Less Likely To Take Time Off For Illness Or Injury Compared To Those With Paid Sick Leave. *Health Aff (Millwood).* 2016;35(3):520-527.
19. Cobb WM. The Tuskegee syphilis study. *J Natl Med Assoc.* 1973;65(4):345-348.
20. Brown D. Johns Hopkins names building to honor Henrietta Lacks and her 'immortal' cells. *The Washington Post* October 8, 2018.
21. Rivas A. Minority communities' distrust of COVID-19 vaccine poses challenge. *abc News*; 2020.
22. Jones NL, Gilman SE, Cheng TL, Drury SS, Hill CV, Geronimus AT. Life Course Approaches to the Causes of Health Disparities. *Am J Public Health.* 2019;109(S1):S48-S55.
23. Artiga S, Orgera K, Pham O. Kaiser Family Foundation. Disparities in Health and Health Care: Five Key Questions and Answers. 2020; <https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-five-key-questions-and-answers/>. Accessed December 14, 2020.
24. American Public Health Association. Declaration of Racism as a Public Health Issue. <https://www.apha.org/topics-and-issues/health-equity/racism-and-health/racism-declarations>. Accessed December 14, 2020.
25. What Is Implicit Bias, How Does It Affect Healthcare? <https://patientengagementhit.com/news/what-is-implicit-bias-how-does-it-affect-healthcare>. Accessed December 14, 2020.
26. Foronda C, Baptiste DL, Reinholdt MM, Ousman K. Cultural Humility: A Concept Analysis. *J Transcult Nurs.* 2016;27(3):210-217.
27. Greene-Moton E, Minkler M. Cultural Competence or Cultural Humility? Moving Beyond the Debate. *Health Promot Pract.* 2020;21(1):142-145.
28. Wasserman M, Renfrew MR, Green AR, et al. Identifying and preventing medical errors in patients with limited English proficiency: key findings and tools for the field. *J Healthc Qual.* 2014;36(3):5-16.
29. Thorlby R, Jorgensen S, Siegel B, Ayanian JZ. How health care organizations are using data on patients' race and ethnicity to improve quality of care. *Milbank Q.* 2011;89(2):226-255.
30. Svetaz MV, Barral R, Kelley MA, et al. Inaction Is Not an Option: Using Antiracism Approaches to Address Health Inequities and Racism and Respond to Current Challenges Affecting Youth. *J Adolesc Health.* 2020;67(3):323-325.
31. Discrimination: What it is and how to cope. 2019; <https://www.apa.org/topics/racism-bias-discrimination/types-stress>. Accessed January 29, 2021.
32. U.S. Equal Employment Opportunity Commission. Harassment. <https://www.eeoc.gov/harassment>. Accessed January 29, 2021.
33. Penner LA, Blair IV, Albrecht TL, Dovidio JF. Reducing Racial Health Care Disparities: A Social Psychological Analysis. *Policy Insights Behav Brain Sci.* 2014;1(1):204-212.
34. Newman J, Valdes J. Teaching Anesthesia and Diversity. *AANA News Bulletin.* 2019(Sept.):14-15.

35. Kilburn F, Hill L, Porter MD, Pell C. Inclusive Recruitment and Admissions Strategies Increase Diversity in CRNA Educational Programs. *AANA J.* 2019;87(5):379-389.
36. Worth P. The evolution of diversity in nursing and nurse anesthesia. *AANA J.* 2004;72(2):101-105.
37. Walker KO, Moreno G, Grumbach K. The association among specialty, race, ethnicity, and practice location among California physicians in diverse specialties. *J NatlMed Assoc.* 2012;104(1-2):46-52.
38. Laveist TA, Nuru-Jeter A. Is doctor-patient race concordance associated with greater satisfaction with care? *J Health Soc Behav.* 2002;43(3):296-306.
39. Saha S, Komaromy M, Koepsell TD, Bindman AB. Patient-physician racial concordance and the perceived quality and use of health care. *Arch Intern Med.* 1999;159(9):997-1004.
40. Anti-Racism Resources <https://www.umass.edu/provost/resources/all-resources/faculty-diversity/anti-racism-resources>. Accessed January 26, 2021.
41. Curricula Enhancement Module Series. A project of the National Center for Cultural Competence. George Town University Center for Child and Human Development. . <https://nccc.georgetown.edu/curricula/modules.html>. Accessed February 1, 2021.
42. Nair L, Adetayo OA. Cultural Competence and Ethnic Diversity in Healthcare. *Plast Reconstr Surg Glob Open.* 2019;7(5):e2219.
43. Vaughn N. How diversity, equity, and inclusion can influence healthcare. 2020; <https://www.relias.com/blog/how-diversity-equity-inclusion-influence-healthcare>. Accessed February 2, 2021.
44. Braveman PA, Kumanyika S, Fielding J, et al. Health disparities and health equity: the issue is justice. *Am J Public Health.* 2011;101 Suppl 1:S149-155.

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Adopted by AANA Board of Directors February 2021.

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