## Health Disparities

Impact of health disparities and treatment decision-making biases on cancer adverse effects among Black cancer survivors

Jacqueline B. Vo, PhD, RN, MPH, Arielle Gillman, PhD, MPH, Kelsey Mitchell, MPH, RN, OCN®, and Timiya S. Nolan, PhD, APRN-CNP, ANP-BC



**BACKGROUND:** Health disparities affect cancer incidence, treatment decisions, and adverse effects. Oncology providers may hold biases in the decision-making process, which can perpetuate health disparities.

**OBJECTIVES:** The purpose of this article is to describe health disparities across treatment decisions and adverse effects, describe decisionmaking biases, and provide suggestions for nurses to mitigate adverse outcomes.

**METHODS:** A scoping review of the literature was conducted

**FINDINGS:** Factors affecting health disparities stem, in part, from structural racism and decision-making biases, such as implicit bias, which occurs when individuals have unconscious negative thoughts or feelings toward a particular group. Other decision-making biases, seemingly unrelated to race, include default bias, delay discounting bias, and availability bias. Nurses and nurse navigators can mitigate health disparities by providing culturally appropriate care, assessing health literacy, providing education regarding adverse effects, serving as patient advocates, empowering patients, evaluating personal level of disease knowledge, and monitoring and managing cancer treatment adverse effects.

decision-making; decision bias; treatment adverse effects; cancer survivorship

DIGITAL OBJECT IDENTIFIER 10.1188/21.CJON.S1.17-24

THERE ARE ROUGHLY 16.9 MILLION CANCER SURVIVORS living in the United States, and advances in cancer treatment have contributed to longer survival (American Cancer Society, 2021). Living longer, cancer survivors are experiencing adverse effects of cancer treatment, such as cancer pain and infertility, persisting years after treatment completion (National Comprehensive Cancer Network, 2020). However, cancer and its treatment have historically led to disparate outcomes for Black patients with cancer relative to White patients across cancer incidence, mortality, and adverse effects (American Cancer Society, 2019b). Health disparities are differences in cancer measures—such as incidence, treatment, and mortality—among cancer survivors from certain population groups (National Cancer Institute, 2015). The causes of health disparities are varied and occur at multiple levels of influence; however, when considering the patient-provider interaction, treatment decision-making can differ for Black patients compared to White patients (Nocon et al., 2020; Patel et al., 2015; Savitch et al., 2021), which, subsequently, may lead to disparities in which Black patients are more likely to suffer from adverse effects of cancer and its treatment (e.g., mortality and cancer-related morbidities) (Berkman et al., 2014; Collin et al., 2020; Connor et al., 2021; Pallok et al., 2019; Stein et al., 2016; Troeschel et al., 2019).

Despite increasing concerns about the adverse effects of cancer treatment, patients and oncology providers may hold biases in the decision-making process, such that the risk and/or management of adverse effects, toxicities, and late effects are not always appropriately or thoroughly considered in treatment decisions (Forman et al., 2010; Gillman et al., 2021; Henry et al., 2018; Koop et al., 2021; Peng et al., 2019; Shields et al., 2019). Decision-making biases combined with structural racism (i.e., embedded racial hierarchies in societal norms and institutional practices [Pallok et al., 2019]) may disproportionately affect Black patients with cancer and perpetuate health disparities.

This scoping review of the literature does the following:

- Outlines how health disparities exist for treatment decisions and adverse effects of cancer treatment among Black patients with cancer
- Describes how biases within treatment decision-making (such as implicit bias, default bias, delay discounting bias, availability bias) that are well-established in the psychological and decision science literature can perpetuate health disparities
- Discusses implications of decision-making biases in oncology practice and the potential negative impact on Black patients with cancer