Correspondence to editorial on "Differences in liver and mortality outcomes of non-alcoholic fatty liver disease by race and ethnicity: A longitudinal real-world study"

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We thank Dr. Bae for his interest in and thoughtful comments on our recent study, which highlights differences in clinical outcomes among patients with non-alcoholic fatty liver disease (NAFLD) in the United States by race and ethnicity\(^1\).

We agree with Dr. Bae that genetic, environmental, and socioeconomic factors have synergistic effects on NAFLD disease progression and outcomes. In the United States, health disparities among racial and ethnic groups are well-recognized in the literature. These disparities exist in the context of social determinants of health, such as access to quality health care, education, nutritious food, and safe neighborhoods without violence or pollution\(^2\). In addition, the modern-day consequences of redlining, systematic discrimination in employment, housing, and the justice system together created and reinforced structural determinants of health that further resulted in worse health outcomes for marginalized communities\(^3\).

As shown in our study, Black patients had a lower NAFLD prevalence compared to patients in other racial and ethnic groups but had worse clinical outcomes once diagnosed. This paradox suggests likely a combination of delayed diagnosis and suboptimal treatment, whether from upstream barriers to care or direct implicit biases in clinical decision-making, and a higher burden of metabolic comorbidities in this group of patients. We also found that Hispanic patients were at a much higher risk for liver-related mortality compared to White patients. This could be partly attributed to the high prevalence of known genetic polymorphisms in this population, as discussed by Dr. Bae, which may confer increased susceptibility to hepatic steatosis and hepatic injury. However, the excess NAFLD burden in the Hispanic community should be conceptualized at the intersection of genetic susceptibility, individual and community health norms and practices, and
other social determinants of health. Among Hispanic individuals, a study found that those of Cuban, Puerto Rican, and Dominican backgrounds had a lower NAFLD prevalence compared to those of Mexican heritage\(^4\). This highlights the heterogeneity within a broad racial categorization and the need for disaggregated race and ethnicity data to fully characterize community- and culture-specific needs and, ultimately, appropriate interventions. Even among Asian Americans with the lowest cumulative incidence of adverse outcomes in our study, we postulate that the risk of disease progression varies among the different Asian subgroups. Therefore, future efforts to collect disaggregated race and ethnicity data are needed for better healthcare delivery research, policy changes, and interventions.

Our findings are consistent with a previous population-based study using the National Health and Nutrition Examination Survey (NHANES) 2011–2016, which found a low NAFLD prevalence but a high fibrosis prevalence within the non-Hispanic Black population\(^5\). Additionally, the awareness of NAFLD remains low in the U.S. across all racial and ethnic groups, but especially low among Black patients, which could also contribute to lower and more delayed diagnoses. The lack of disease awareness in the general population is especially alarming when most participants in the study above had at least one visit to a healthcare facility in the past year, highlighting missed opportunities for healthcare professionals to diagnose and link patients to appropriate care resources. Therefore, future efforts are needed to increase community and patient awareness and improve continuing medical education so that all healthcare professionals can screen for NAFLD, especially among those with risk factors.
In summary, mounting evidence within and outside of the field of hepatology continues to highlight alarming health disparities among racial and ethnic groups in the U.S., with marginalized groups having the highest burden of diseases. We believe educating patients and providers about NAFLD is crucial, given the ongoing suboptimal awareness, even among patients with access to care, to improve screening rates and the care continuum. With new pharmacotherapy already approved and more in the pipeline for NAFLD treatment, it is crucial that we continue to identify and address barriers to care at the community and systemic levels to ensure equitable and accessible care cascade for patients with NAFLD.
References


