Socioeconomic conditions are fundamental causes of health inequities, including COVID-19. Given the long-term sequelae of COVID-19, it is important to understand how socioeconomic factors may be associated with COVID-19 diagnosis in early life. In the study by Dragano et al, administrative health insurance data were used to investigate the association between socioeconomic conditions and COVID-19 hospitalization among 690,115 individuals aged 18 years or younger in Germany between January 1, 2020, and July 13, 2021. In this study, children within households with lower socioeconomic position, as determined by parental employment status, had significantly higher rates of hospitalization from COVID-19. After adjustment for age, sex, sociodemographic variables, and comorbidities, children with parents classified as long-term unemployed had higher odds of COVID-19 hospitalization (odds ratio [OR], 1.36; 95% CI, 1.22-1.51) than children with parents who were employed. In additional analyses that investigated area-level measures, children living in low household income districts had higher odds of COVID-19 hospitalization (OR, 3.10; 95% CI, 1.78-5.43) than children living in districts with high median household income, even after accounting for individual-level socioeconomic position. While the administrative insurance database used in this study is comprehensive, several important factors could not be accounted for, such as differences in health care utilization or ascertainment of outpatient COVID-19 diagnoses. Also, vaccinations were not generally available during the study period for this age group and therefore unlikely to account for these associations. The findings from this study by Dragano et al suggest that there is a cost associated with social disadvantage, even in settings with established social systems.

Prior work has shown that children residing in areas with higher income inequality have worse health outcomes, as these children tend to have limited upward social mobility and reduced access to resources. It is plausible that socioeconomic position may pattern with other factors that have a clear biological association with health outcomes. For example, individual-level factors such as second-hand smoke exposure, poor dietary quality, and physical inactivity are more prevalent in socioeconomically disadvantaged households. Additionally, area-level factors, such as exposure to environmental pollution, are more common in socioeconomically disadvantaged areas. While these individual-level and area-level factors may explain part of the excess disease risk, the effect of socioeconomic disadvantage on adverse health outcomes remains. Since Marmot et al published their seminal findings from the Whitehall Study on occupational class and health outcomes among civil servants, evidence continues to accumulate that those who have lower socioeconomic positions have poorer health outcomes. Moreover, socioeconomic disadvantage is closely linked to income inequality, which is highly correlated with population-wide health outcomes. This is particularly stark in the United States, a country that ironically has one of the highest per capita incomes but some of the worst health measures when compared with other developed nations.

There are biologically plausible mechanisms through which socioeconomic position and associated chronic stress may lead to physiological changes that result in adverse health outcomes. For example, chronic stress may elicit aberrations in glucocorticoid homeostasis and elevations in inflammatory markers. Additionally, racism has been posited as a fundamental driver of adverse health outcomes, directly and indirectly, given that it reflects the myriad ways in which mutually reinforcing systems limit social and economic opportunities globally and particularly in the United States. To address socioeconomic determinants of health, comprehensive approaches that address these root causes of health inequities are needed. Community-based interventions have typically targeted specific downstream factors, such as food insecurity, housing insecurity, or access to health.
care. Approximately 11% of the US federal budget ($665 billion) goes to economic security programs, which often focus on identifying and mitigating the secondary effects of poverty. Based on the current US poverty rate, if given as a cash benefit, it would result in a net increase in income of almost $18,000 per person (including children). Although challenging from a policy perspective, recent experience has demonstrated that interventions that address core social determinants of health can have both immediate and lasting impacts. For example, in the Moving to Opportunity Study, residents of public housing developments were randomized to receive one of the following: a housing voucher to move to a low-poverty neighborhood, an unrestricted housing voucher, or no housing voucher. Among those residents who were children at the time of randomization, those that received a voucher had a lower hospitalization rate and lower hospital expenditures than children who did not receive a voucher after a median of 11 years of follow-up. Additionally, the magnitude of this association was stronger among younger children (age <13 years) than adolescents (age 13-17 years), underscoring the influence of early life socioeconomic position on health outcomes. Further results also showed that younger children had greater improvements in earning potential and college attendance, further reinforcing the importance of place and social opportunities on outcomes. Residential policies that limit social mobility, such as zoning ordinances against multifamily housing to restrict lower income families to high poverty zones, continue to exist. These policies create socioeconomically disadvantaged communities and will require equitable and innovative approaches to redress the harms of these policies. A clear example of a comprehensive approach that achieved meaningful results is the economic supports provided through the COVID-19 pandemic relief programs in the United States (such as the Economic Impact Payment and expanded Child Tax Credits). These programs achieved what decades of targeted, bureaucratic efforts have failed to do—they reduced childhood poverty, which could in turn benefit an entire generation. In 2020, 3.2 million children in the United States (8 million overall) were elevated above the poverty level. Policies and legislation are needed that foster equitable environments, devoid of the societal ills of income inequality, poverty, and racism, if we want to achieve maximal health for all.

ARTICLE INFORMATION
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Corresponding Author: Thomas E. Dobbs, MD, MPH, John D. Bower School of Population Health, University of Mississippi Medical Center, 2500 N State St, TRC 213, Jackson, MS 39216 (tdobbs@umc.edu).
Author Affiliations: John D. Bower School of Population Health, University of Mississippi Medical Center, Jackson (Dobbs); Department of Medicine, University of Mississippi Medical Center, Jackson (Carson).
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