Eliminating Racial Differences in Pediatric Cancer

Health Equity

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As a pediatric oncologist, Childhood Cancer Awareness Month is an opportunity to reflect on all the progress we have made in curing the leading disease-related cause of death among children. In the 1950s, leukemia was uniformly fatal with few exceptions, and now we cure more than 80 percent of children. With the recent Food and Drug Administration (FDA) approval of cellular therapy to treat pediatric leukemia, these numbers will likely continue to improve over time.

Unfortunately, the benefits of these treatment advances have not been equally distributed. In particular, black children with acute myeloid leukemia (AML) – which has lower survival rates than other types of leukemia – have even lower survival rates (45 percent) compared to white children (60 percent). The reason for this racial disparity remains a mystery.

In a pair of recent studies, our research team evaluated the role that access to care and insurance play in this mortality disparity for youth. We found that black pediatric patients are more likely than white patients to present with severe complications, like multi-organ system failure, when they are first diagnosed with AML and that they have twice the risk of dying in the first 50 days. These findings suggest that factors prior to diagnosis and initial hospitalization impact the risk of dying early and further investigations are needed.

This led us to question whether health insurance source (as a marker of access to care and socioeconomic status) played a role in these inequities. We found that black patients with private insurance had a risk of dying similar to white patients with private insurance (1.6 percent vs 2.1 percent), but that the risk of dying for black patients with public insurance was higher than for white patients with either private or public insurance (6.0 percent vs 3.1 percent).

We found no differences in the treatments received within or outside the intensive care unit after diagnosis at the more than 40 U.S. children's hospitals included in this study. Physicians confirmed the diagnosis, the patients started receiving chemotherapy and then stayed in the hospital for the same amount of time, regardless of race. When we examined who received antibiotics, pain medicines and all of the other components of supportive care, these too were the same between black and white patients. In other words, when patients walked in the doors of these children's hospitals and their initial condition is taken into account, black and white youth received the same care. Likewise, when we evaluated the patients who ultimately died, we found the same length and intensity of treatment amongst black and white children.

Our findings suggest that something preceding diagnosis is contributing to black children with AML coming to the hospital sicker and dying more often. Although more research is needed, strengthening children's relationships with their pediatricians to establish better continuity and trusting doctor-patient relationships would likely enable all patients to have access to high-quality health care in their communities and enhance their ability to be diagnosed as early as possible.

As we recognize Childhood Cancer Awareness Month, let’s take stock of the progress that we should be proud of, but also commit to ensuring the same positive outcomes for all children.

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