Exploring Disparities in Pediatric Cancer Outcomes Among Hispanic Children in Puerto Rico

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Studies have shown that, compared to other racial/ethnic groups in the United States, Puerto Rican children have disparities that result in higher prevalence of chronic diseases and rates of mortality. This project aims to investigate how socioeconomic, geographic, and genetic factors contribute to disparities in pediatric cancer outcomes among Hispanic children in Puerto Rico (PR). It was hypothesized that children with cancer in PR face worse outcomes than their counterparts on the U.S. mainland, due to higher rates of advanced-stage diagnoses, limited access to specialized care, and unique genetic and environmental factors. In this project, a database of patients' information, which identifies 41 pediatric cancer patients in PR from 2013 to 2023, was utilized to recognize geographic disparities. To investigate this, the city of providence of the 41 patients was evaluated, and they were each classified into their geographic region according to the 2000 and 2010 PR Census Metropolitan Statistical Areas. The staging and outcome of the patients were also evaluated to represent the direct impact that disparities have on advanced-stage diagnosis. It was shown that children with cancers in PR face worse outcomes than their counterparts in the United States. The evidence showed that there is a present disparity in access to specialized care, acknowledging that 55% of the patients were not from the San Juan MSA, where most specialized cancer treatment centers are located. From the results, it can be inferred that the accessibility to specialized care has a direct impact on advanced-stage diagnoses. Therefore, the hypothesis can be accepted.

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