



Research Week 2020

Novel Interventions in Children's Healthcare: Outcomes of Minority Youth with Type 1 Diabetes

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Keywords

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Abstract

Introduction

Significant advancements in pediatric care have been made over the years, but racial and ethnic inequities in health outcomes persist. Novel Interventions in Children's Healthcare (NICH), a family-based intervention program for youth with chronic medical conditions and psychosocial stressors, is associated with better health outcomes for youth with type 1 diabetes (T1D). However, little is known about whether race/ethnicity may moderate such outcomes.

Objective

Compare NICH T1D outcomes of minority youth to non-Hispanic white youth.

Methods

Youth with T1D participated in NICH (n=53); those of non-white race and/or Hispanic background were grouped as "minority" (n=11). Retrospective chart reviews comprised ED visits, admissions, days admitted, and DKA events 1 year prior through 2 years after NICH initiation.

Results

There were no significant differences in mean admissions, days admitted, and ED visits among minority youth throughout the three time periods. Minority youth had a substantial but statistically non-significant decrease in DKA events from pre-NICH to 1 year (1.36 to 0.27; $p=0.59$). Majority youth displayed significant ($p<0.05$) reductions in admissions (1.9 to 1.1), days admitted (5.9 to 2.8), and DKAs (1.5 to 0.8) after 2 years. There were no significant differences between improvements experienced by minority and non-Hispanic white youth.

Conclusion

Although both non-Hispanic white youth and minority youth both demonstrated fewer acute complications following program initiation, the trends seemed to differ. Minority youth appeared more likely to experience large reductions in utilization in the first year with some regression in the second year, while non-Hispanic white youth showed smaller improvements in the first year but continued reductions in utilization during year 2. This second year often represents post-program outcomes and could reflect the continuation of inequities experienced by minority youth post program support; however, small sample size limits definitive conclusions. Further research is needed to assess racial/ethnic disparities in pediatric interventions.