

Daily Diabetes Treatment Barriers in Youth with Type 2 Diabetes



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Building Interdisciplinary Research Careers in Women's Health

BACKGROUND

- Pediatric type 2 diabetes (T2D) disproportionately affects females, at incident rates nearly twice that of their male counterparts.
- Youth-onset T2D has an aggressive clinical course, making treatment adherence crucial to achieve optimal glycemic control and reduce risk of diabetes-related complications.
- Up to 70% of youth with T2D are nonadherent to one or more components of their diabetes regimen (i.e., medication, diet, physical activity).
- Objective:** Examine barriers to diabetes treatment (i.e., medication, diet, and physical activity) in youth with T2D.

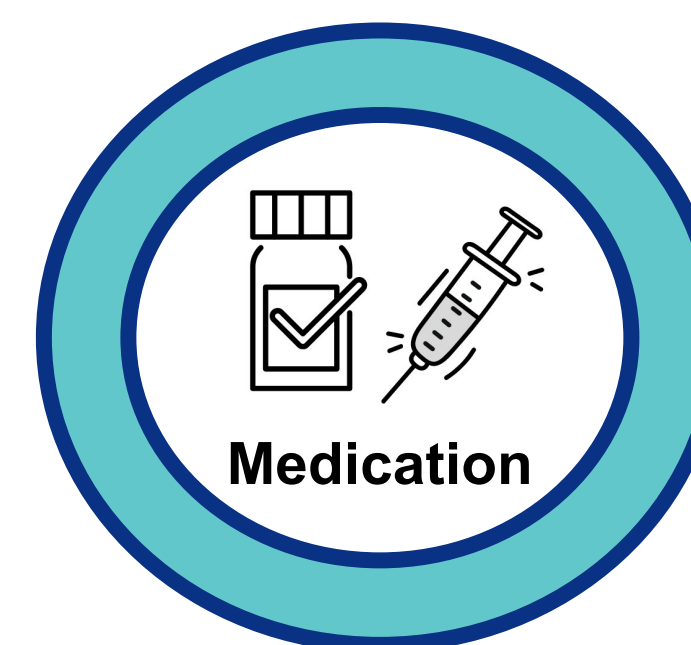
RESULTS

Table 1.

Child Age	M (SD)
Age in years	15.3±1.9
Child Sex Assigned at Birth	N (%)
Female	9 (90%)
Child Race	N (%)
American Indian or Native American	0 (0%)
Asian American	2 (20%)
Black or African American	2 (20%)
Native Hawaiian or Other Pacific Islander	0 (0%)
White	1 (10%)
Other	0 (0%)
Multiracial	4 (30.8%)
American Indian or Native American & Black or African American n=1	
American Indian or Native American & White n=1	
Asian American, Black or African American, & White n=1	
Black or African American & White n=1	
Not reported	1 (10%)
Child Ethnicity	N (%)
Hispanic or Latino	1 (10%)
Family History of	N (%)
T2D	9 (90%)
Obesity	6 (60%)
Hypertension	8 (80%)
Heart Disease	4 (40%)
Household Income	N (%)
Less than \$20,000	3 (30%)
\$20,000 - \$34,000	3 (30%)
\$35,000 - \$49,000	1 (10%)
\$50,000 - \$74,900	0 (0%)
\$75,000 - \$99,999	0 (0%)
\$100,000 or more	2 (20%)
Not Reported	1 (10%)



60% experienced discrimination in the last year



Treatment Barriers

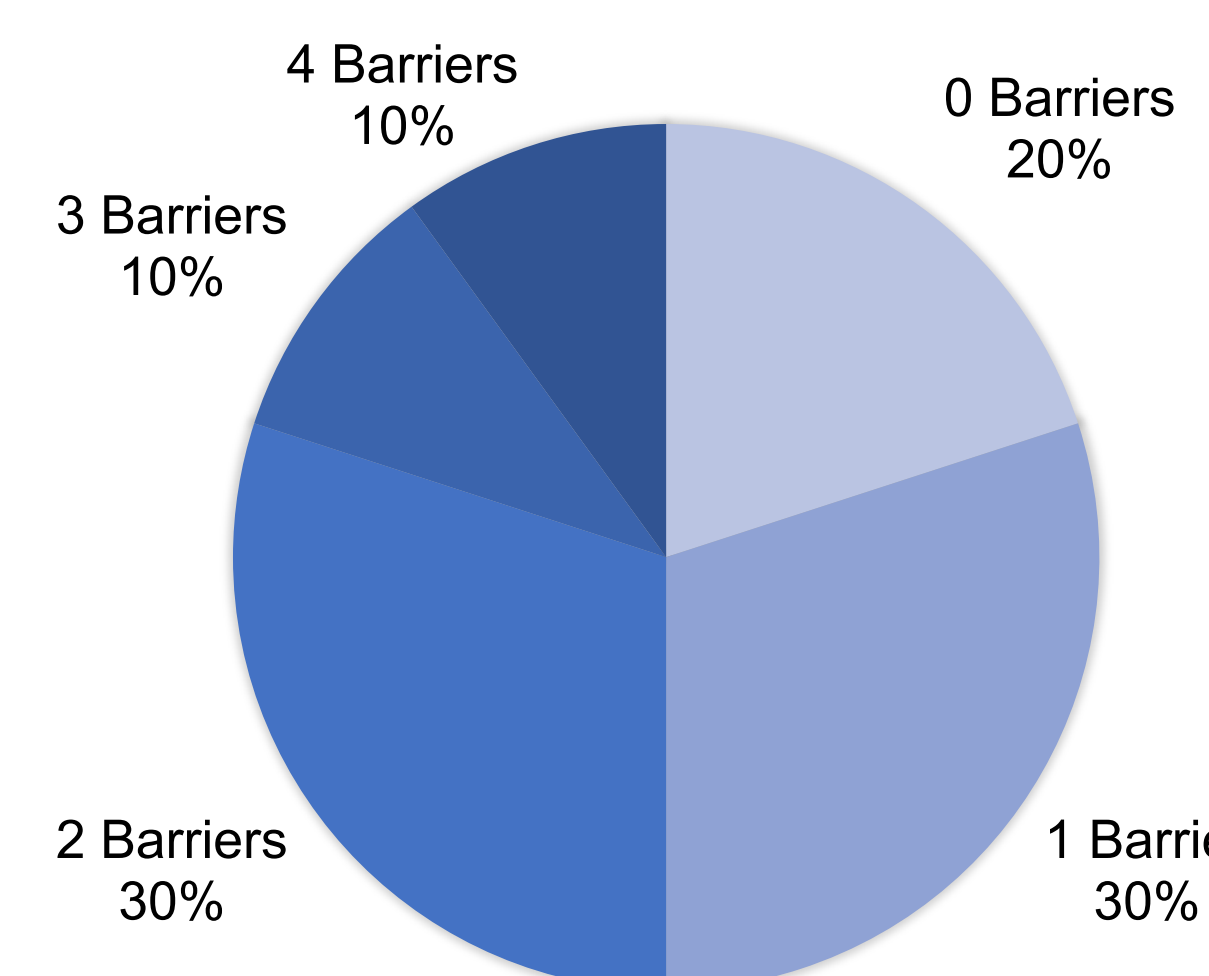


Figure 1. Number of medication barriers reported by participants.

- 80% of youth reported ≥ 1 medication barrier
- Common medication barriers included forgetting and lack of family support

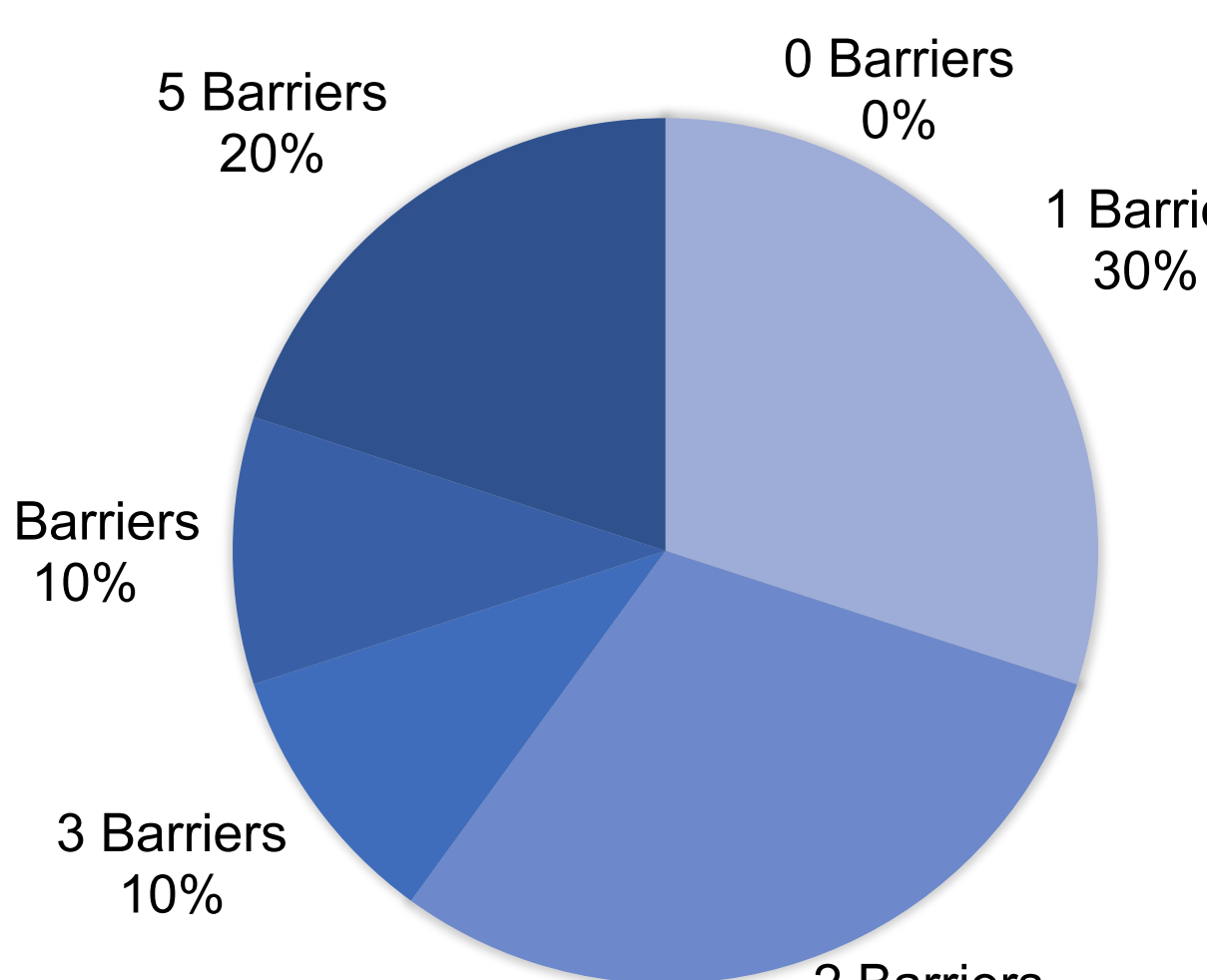
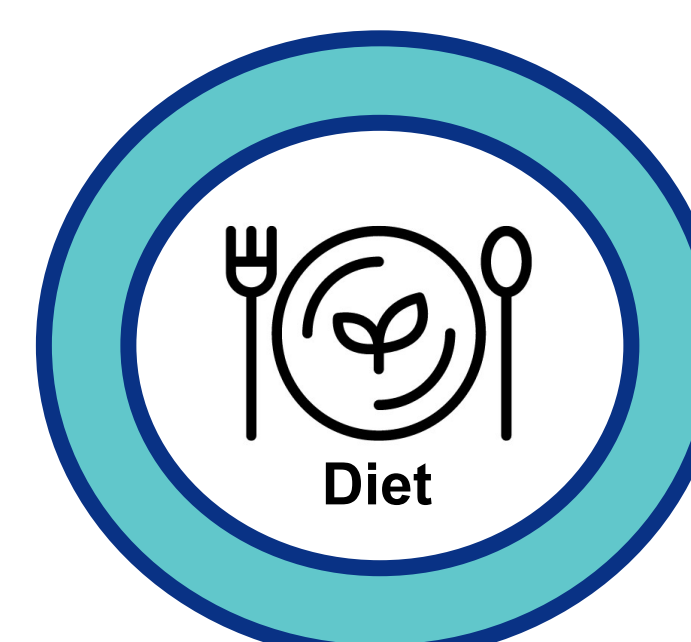


Figure 2. Number of diet barriers reported by participants.

- 70% of patients reported ≥ 1 diet barrier
- Common barriers included lack of access to healthy food options and being too tired to prepare a healthy meal

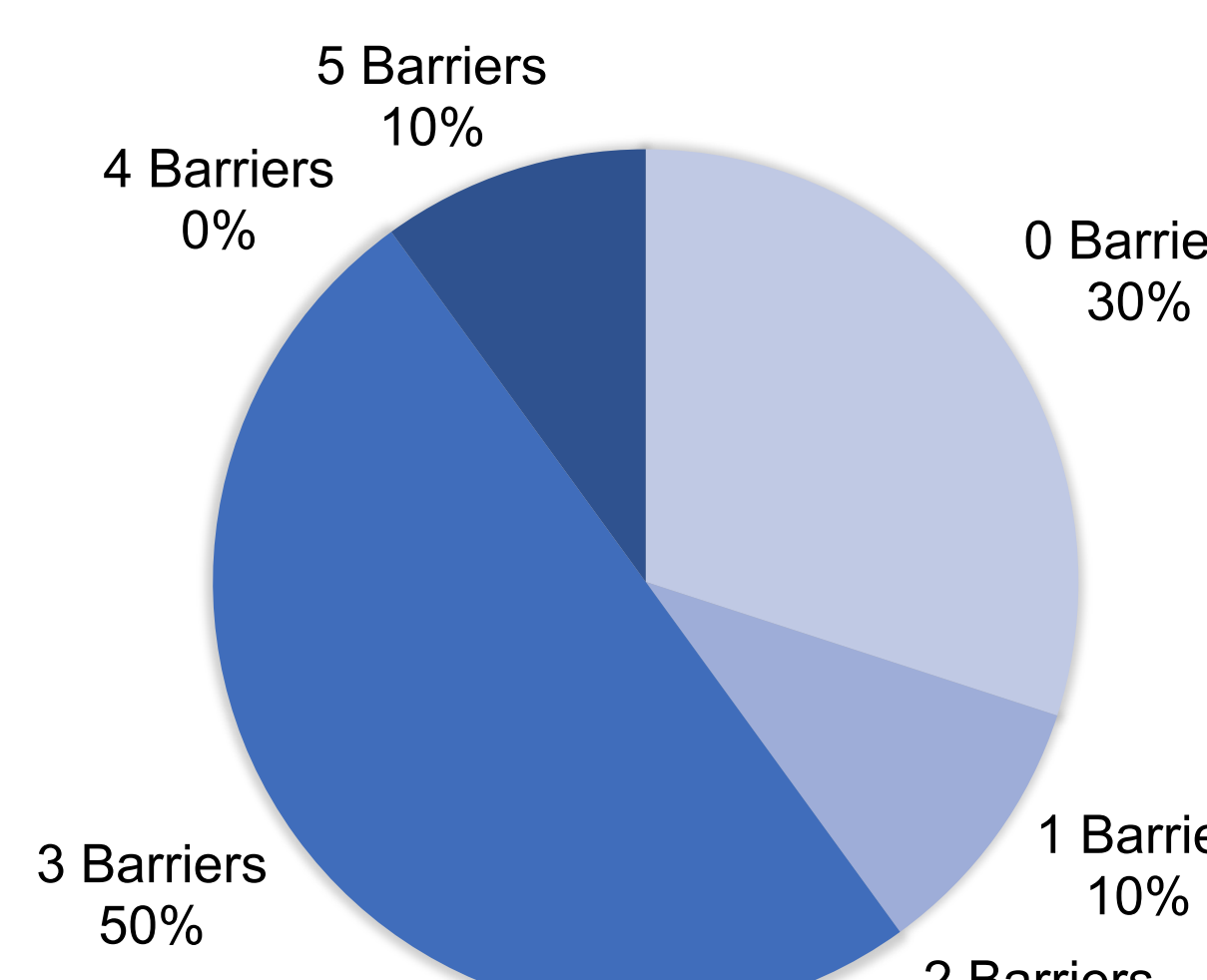
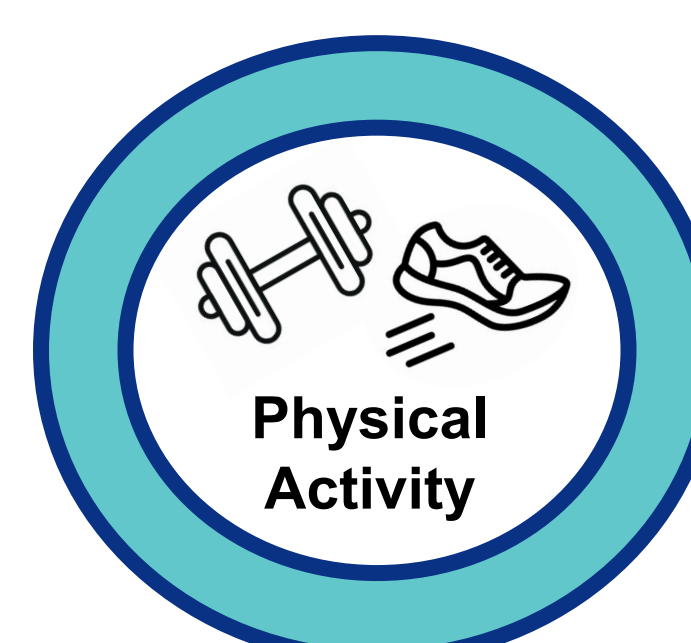


Figure 3. Number of physical activity barriers reported by participants.

- All patients reported ≥ 1 exercise barrier
- Common barriers included lack of time and tiredness

METHODS

- Ten youth completed 2 weeks of ecological momentary assessment surveys (Mean days of EMA surveys 12.4±3.2) regarding daily barriers to their diabetes regimen.
- Descriptive statistics were computed to examine the sample demographic along with the frequency and patterns of barriers to diabetes medication, diet, and physical activity.

CONCLUSION

- Youth with T2D come from diverse backgrounds and appear to encounter social determinants of health that may influence their diabetes management.
- Youth with T2D encounter daily challenges managing at least one component of their diabetes regimen.
- Adherence interventions designed to meet the unique needs of this patient population are needed.