

The Association Between Number of Social Needs and Depressive Symptoms Among Youth and Young Adults with Type 1 Diabetes

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Research Overview



Background:

- Youth and young adults (YYA) with type 1 diabetes (T1D) may be at risk for social needs and depression due to the disease-associated cost and stressors (Kalra 2018; Silverman 2015).
- Little is known about how social needs are linked to depressive symptomatology.

Objective: To examine the association of social needs with depressive symptoms among YYA with T1D

Methods

Data/Sample

- SEARCH Food Security (SFS) Study
 - SFS is an ancillary study of the SEARCH for Diabetes in Youth Study
 - Used SFS Follow-up 1 data 2018-2020
 - Sample included 685 YYA with T1D (55.8% Female, 76.2% Non-Hispanic White)
 - Diabetes duration (mean: 13.6 years; range 6.3-18.0 years)
 - YYA age 14-35
 - Mean (SD) CES-D score was 14.3 (11.9), which is below the cutoff score of 16 for risk of depression

Measures

- Social needs/Social determinants of health (SDOH) measured:
 - USDA Household Food Security Survey Module (food secure vs food insecure)
 - Primary mode of transportation (personal vehicle vs other form of transportation)
 - Had stable housing (all the time vs some or none of the time) over the past 90 days
 - Total number of Social needs/SDOH (0-3)= sum of Social needs/SDOH
- Depressive symptoms (range=0-60 on CES-D)



Statistical Analysis

- Linear regression models
- Covariates: Age, sex, race/ethnicity, site clinic, diabetes duration, parental education, and household income

Number of Social Needs/SDOH are Associated with Higher Depressive Symptom Scores Among YYA with T1D

	N (%)	# of Social Needs ¹	β	se	p-value	Adj β*	se	p-value
Overall	685							
	41(6.0)	2 or 3 Social Needs	16.9	1.9	<.0001	15.9	1.9	<.0001
	154 (22.5)	1 of 3 Social Needs	6.1	1.0	<.0001	5.9	1.1	<.0001
	490 (71.5)	No Social Needs	Ref	Ref	Ref	Ref	Ref	Ref

SEARCH

Youth

* Adjusted for sex, race/ethnicity, age, duration of diabetes, clinic site , parental education, and household income

¹ Having one or more 'Social need' is defined as any participant who reports having non-stable housing, who is classified as being food insecure using the USDA Household Food Security Survey Module, and/or who reports not having a personal (or parent) vehicle to use a primary mode for transportation

Conclusions



- Social needs among YYA with T1D are confluent and are jointly and cumulatively associated with depressive symptoms.
- Future studies should investigate the impact of alleviating social needs on depressive symptomatology among YYA with T1D.