



October 6th + 7th, 2021 | Virtual Conference

17TH ANNUAL CHILD HEALTH RESEARCH DAYS

Nutrition for a Changing World

The Science of Nourishing the Next Generation

CHRD 2021: Abstract & Poster Submission Form

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Research Category:

- Basic Science
- Clinical
- Community Health / Policy

What was your role in the project?

- Design
- Perform Experiments
- Analyze Data
- Write Abstract

Presenter Status:

- Undergraduate Students
- Masters Student
- PhD Student
- Post-Doctoral Fellows
- Residents
- Non-Trainee

Title

How Psychological Factors Affect Medication Adherence in Youth with Type 2 Diabetes

Background

Adolescents with type 2 diabetes (T2D) experience a range of barriers to medication adherence. External factors such as cost or availability are known to affect adherence, however the impact of internal factors is unknown. We hypothesize that positive (resiliency) and negative (distress and stress) psychological factors will be associated with greater and lesser adherence, respectively.

Objective

This study will examine how psychological factors are associated with medication adherence in youth with T2D.

Methods

This is a cross sectional study of 331 youth with T2D enrolled in the Improving Renal Complications in Adolescents with Type 2 Diabetes through Research (iCARE) study. The primary outcome is adherence to diabetes medication (injected and oral). Resiliency (Child and Youth Resiliency Measure), distress (Kessler Distress scale) and perceived stress (Perceived Stress Scale) were measured. Covariates included social factors (Household Food Security Survey and Social Support Survey) and age, sex, body mass index (BMI) z score and hemoglobin A1C (HbA1C).

Results

Participants were excluded if they were not taking either an insulin or an oral anti-diabetes medication (n=89) and if they did not answer the adherence question in the medication questionnaire (n=93). In our cohort (n=149), a total of 46% youth met criteria for adherent (n=69), 35.2% male; mean age 14.9 ± 2.4 years; BMI z-score 2.5 ± 0.9 . HbA1c was higher in the non-adherent group (10.5% vs 8.7%), however no association was found with distress ($p=0.206$), perceived stress ($p=0.387$) or resiliency ($p=0.292$) scores. Social support ($p=0.033$) and food security ($p=0.005$) were associated with greater adherence. Participants taking an oral medication were more likely to be adherent than those taking an injection alone (OR 2.28; CI 95% 1.16-4.47).

Conclusion

Psychological scores were not different between adherent and non-adherent groups. Significant differences found in social determinants including social support and food security suggest ongoing need for support for youth with T2D.

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- For each author, please click "[+] Add Item" and provide the author's information

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