
Comparing diabetes-related outcomes by chronicity of depressive symptoms among Hispanic adolescents with type 1 diabetes

Comparación de criterios de evaluación relacionados con la diabetes según la cronicidad de los síntomas depresivos entre adolescentes de ascendencia hispana con diabetes tipo 1

Tayna M. **Rivera-Rodríguez**, Nydia M. **Resto-Arroyo**, Eduardo **Cumba-Avilés**,
Bianca P. **Abreu-Castro** & Alejandra M. **González-Ortiz**

Institute for Psychological Research, University of Puerto Rico–Rio Piedras Campus

Abstract

A history of chronic depressive symptoms (HCDS) relates to negative health-related outcomes in adults with physical illnesses. Few studies have examined this association among adolescents with Type 1 Diabetes (T1D). We explored differences in diabetes-related outcomes among T1D youth with (G1; $n = 17$) and without (G2; $n = 34$) any HCDS. Participants were 51 Hispanics (aged 12-17 years) enrolled in a depression treatment study. Adolescents and one parent each completed several measures. Using MANOVA, followed by individual ANOVAs, we compared groups in continuous variables and, with Chi-Square tests and Odds Ratio (*OR*), we examined the association of categorical outcomes with group membership. MANOVA results were significant [$F(3, 47) = 6.27, p = .001$]. Adolescents from G1 reported significantly lower family support with insulin care and higher severity of hypoglycemia than their counterparts, and (as rated by caregivers) faced more barriers to adhere to glucose testing self-management. HCDS related to higher odds of having incidents of non-compliance with insulin regimen ($OR = 12.12; p \leq .001$) and needing reminders to comply with such treatment ($OR = 11.20; p \leq .01$). A higher percentage of adolescents from G1 reported having experienced diabetes-related stigma ($\chi^2 = 4.55; p \leq .05$), but a lower proportion met criteria for glycemic control ($\chi^2 = 7.85; p \leq .01$), compared to youths in G2. HCDS relates to negative diabetes-related outcomes among T1D Hispanic adolescents. Interventions targeting depression chronicity are needed to improve healthcare among these patients.

Funded by NIDDK (R03DK092547)