

Descriptive statistics of the analytic sample are presented in the eTable; <http://links.lww.com/EDE/B598>. The Table shows the difference in mental health for being victim of violence results across all strata of disability status. There was an effect of violence on mental health among men who had transitioned from being disabled to not disabled, men who had always been disabled, women who had become disabled, and men who had become disabled.

Strengths of this study include the data being a large nationally representative sample, and the more causally robust fixed-effects analysis. Among the study limitations are that self-reported data may be susceptible to response bias (e.g., social desirability effects), dependent measurement error (errors in self-reported exposure and outcomes correlated due to individual-level factors), underreporting of violence, and people with severe disability, and perhaps those experiencing violence, may be less likely to participate in HILDA. While out of scope for this short report, future research could apply g-computation to analyze the dynamic interplay between our exposure (violence), effect modifier (disability), and confounders. Future research should endeavor to use improved measures of exposure to violence.

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# The Prevalence of Type 1 Diabetes in Hispanic/Latino Populations in the United States: Findings from the Hispanic Community Health Study/Study of Latinos

## To the Editor:

Estimates of type 1 diabetes in “All Hispanic” and Mexican-American populations were reported in 2013 using National Health and Nutrition Examination Survey (NHANES) data collected between 1999 and 2010,<sup>1</sup> but this study did not examine sufficient numbers of participants from diverse Hispanic/Latino groups to report group-specific estimates. However, there are no estimates of the population prevalence of type 1 diabetes mellitus in diverse Hispanic/Latino groups in the US. The Hispanic Community Health Study/Study of Latinos is a community-based epidemiologic study of health and disease in Hispanic/Latino adults residing in four US communities. Participants included individuals of Cuban, Dominican, Mex-

ican, Puerto Rican, Central American, and South American backgrounds. The study design and implementation have been described in detail,<sup>2</sup> each study site and coordinating center received approval from their Institutional Review Board for the study protocol and informed consent was obtained for all participants at the baseline examination visit. Although presence of type 1 diabetes was not specifically ascertained, we differentiated type 1 from type 2 diabetes mellitus using the following methods mirroring NHANES: diagnosis before 30 years of age, currently treated with insulin, and insulin use within 1 year of diagnosis. Of the 16,415 participants examined at baseline (2008–2011), 16,290 participants (ages 18–74 years, 60% male) had complete data on age at diabetes diagnosis, current treatment with insulin and insulin within 1 year of diagnosis. Information on HbA1c was available for 16,091 participants. Data were analyzed using SAS version 9.3 (SAS Institute). All reported estimates were weighted to adjust for sampling probability and non-response using the existing study protocol.

The overall prevalence of type 1 diabetes in this study was 1.8/1000 persons (95% confidence interval [CI] = 0.95, 2.6/1000), i.e., similar to the estimates obtained through NHANES (2.6/1000) and the SEARCH for Diabetes in Youth Study (1.5/1000).<sup>3</sup> The prevalence of type 1 diabetes varied by Hispanic/Latino background, with individuals of Dominican backgrounds experiencing the highest prevalence (6.1/1000, 95% CI = 0.0, 12.4/1000) (Table). The authors feel confident that this estimation of type 1 diabetes identified individuals who were likely to have disease based on the measure of glycemic control, HbA1c. Overall, the average HbA1c among those identified as having type 1 diabetes was 9.62 (95% CI = 8.52, 10.71); HbA1c ranged from 11.52 (95% CI = 8.95, 14.08) in persons of Puerto Rican background to 8.22 (95% CI = 7.24, 9.20) in those of Mexican ethnicity. This is consistent with the range of HbA1c values observed in non-Hispanic white and African American individuals with type 1 diabetes.<sup>4</sup>

Although rare in the general population, type 1 diabetes represents a

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**TABLE.** Prevalence (percent) of Type 1 Diabetes Mellitus in Hispanic/Latino Sub-Groups by Gender and Age Group, Hispanic Community Health Study/Study of Latinos<sup>a</sup>

	All N = 16,290	Cuban n = 2345	Dominican n = 1472	Mexican n = 6456	Puerto Rican n = 2720	Central American n = 1725	South American n = 1071	Other n = 501
Overall % (n)	0.18% (28)	0.23% (6)	0.61% (6)	0.06% (6)	0.22% (7)	0.15% (1)	0.08% (1)	0.03% (1)
95% CI	(0.10, 0.26)	(0.06, 0.41)	(0.0, 1.24)	(0.009, 0.10)	(0.02, 0.42)	(0.0, 0.46)	(0.0, 0.23)	(0.0, 0.08)
Sex								
Male	0.19% (0.06, 0.32)	0.20% (0.0, 0.47)	0.80% (0.0, 2.06)	0.10% (0.005, 0.19)	0.21% (0.0, 0.48)	0	0.17% (0.0, 0.5)	0
Female	0.17% (0.06, 0.28)	0.27% (0.005, 0.54)	0.48% (0.0, 1.13)	0.02% (0.0, 0.06)	0.23% (0.0, 0.54)	0.29% (0.0, 0.86)	0	0.05% (0.0, 0.16)
Current age								
<30	0.32% (0.05, 0.59)	0.36% (0.0, 1.008)	1.34% (0.0, 3.21)	0.04% (0.0, 0.10)	0.38% (0.0, 0.92)	0.53% (0.0, 1.57)	0	0
≥30	0.13% (0.06, 0.19)	0.21% (0.02, 0.39)	0.24 (0.0, 0.50)	0.06% (0.004, 0.13)	0.17% (0.0, 0.37)	0	0.10% (0.0, 0.29)	0.05% (0.0, 0.15)

<sup>a</sup>Type 1 diabetes estimated using the definition; age of diagnosis <30, currently taking insulin and having insulin prescribed early after diagnosis “within 1 year.” CI, confidence interval.

significant health burden for individuals and populations, and its accurate measurement should be a part of any population-level data collection. This analysis indicates that people of Hispanic/Latino origin with type 1 diabetes may experience poor glycemic control, indicating a potential target for intervention.

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