Diabetes disparities in Latino adults in US-Mexico border: Are social contextrelated stressors contributing?

Abstract

Mexican-descent persons living at the border have high rates of diabetes. Health consequences are further exacerbated by SES and health care access disparities, and within Arizona, an intense socio-political environment associated with immigration enforcement. This work examines context-relevant stressors as well as a more general stress and mental health problems, in relating to diabetes. The participants are from proportional household samples of adult Latino farmworkers (Southwest Arizona; N=299) and of Latino adults (Southeast Arizona; N = 648). The data were part of community-based participatory research involving diverse partnerships of academics, promotoras and other community advocates, and other public health professionals requesting surveillance, programmatic and policy-related data. Response rates were over 85%, a testament to the community partnerships and strong community rapport. Except for socialecologic stress (1st sample only; from the Border Community and Immigration Stress Scale) and glucose (2nd sample only), measures were derived from standard behavior/health surveillance instruments. In the farmworker sample 16% reported physician diabetes diagnosis, while in the other sample the rate was 21% (including 1% detected from the glucose test alone). These rates are about 2-3 times that for non-Hispanic whites in the US, and 25-50% higher than the national rates for Latino or Mexican American adults. Models tested in both samples showed among stress and mental health indicators, only the BCISS related to significantly excess (AOR=1.7) risk for diabetes. Efforts to reduce diabetes should consider a broad range of culturally and context-relevant stressors, and consider ways to intervene on the individual, group and policy level.

Related Work

Carvajal, S.C., Rosales, C., Rubio-Goldsmith, R., Sabo, S., Ingram, M., McClelland, D.J., Redondo, F., Torres, E., Romero, A.J., O'Leary, A.O., Sanchez, Z.,& Guensey de Zapien, J.G. (2013). The Border Community and Immigration Stress Scale: A Preliminary Examination of a Community Responsive Measure in Two Southwest Samples. *Journal of Immigrant and Minority Health*. 15(2):427-36. http://www.springerlink.com/content/a5567719354k3w87/

Carvajal, S.C., Kibor, C., McClelland, D.J., de Zapien, J.G., Torres, E., Redondo, F., Ingram, M., Rodriguez, K.^{c,s}, Rubio-Goldsmith, R., Meister, J. & Rosales, C. (2013). Relationships of sociocultural factors to reported health in a border community sample of farmworkers. *Journal of Immigrant and Minority Health*. June 28 [E-Pub ahead of print]. http://link.springer.com/article/10.1007/s10903-013-9853-1

Chang, J., Guy, M.C., Rosales, C., Guensey de Zapien, J., Staten, L.K., Fernandez, M.,& Carvajal, S.C. (2013). Investigating Social Ecological Contributors to Diabetes within Hispanics in an Underserved U.S.-Mexico Border Community. *International Journal of Environmental Research and Public Health*. 10(8), 3217-3232. http://www.mdpi.com/1660-4601/10/8/3217

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