Research sheds new light on epilepsy rates along US-Mexico border

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(Medical Xpress)—UA researchers have found, contrary prior studies, that the prevalence of epilepsy in Hispanics may be half of that in non-Hispanic whites.

A University of Arizona study of epilepsy rates in communities along the Arizona-Sonora border found a dramatic reversal of expectations in regards to epilepsy rates among Hispanics.

The Centers for Disease Control and Prevention-funded study set out to examine rates of epilepsy along the Arizona-Mexico border, focusing on three communities – San Luis, Nogales and Douglas – and found, contrary prior studies, that the prevalence of epilepsy in Hispanics was half of that in non-Hispanic whites.

"The starting point was the observation that in virtually all studies that had been done, minority populations tend to have higher prevalence of epilepsy, but none had been done in a border setting. Most had been done in cities," said Dr. David Labiner, director of the Arizona Comprehensive Epilepsy Program and head of the neurology department in the UA College of Medicine.

Combining two methodologies – random phone calls, much like the state health department uses in its studies, and door-to-door canvassing – Labiner's study focused on determining and comparing the epilepsy rates in the Hispanic population versus the non-Hispanic population specifically along the border. The researchers selected larger
communities in Yuma, Santa Cruz and Cochise Counties, skipping the sparsely populated stretch of the border in Pima County.

The researchers discovered that non-Hispanic whites were two times more likely to have active epilepsy than Hispanics, a surprising reversal of comparative rates that previous city-based studies, in Los Angeles, Atlanta and New York, had determined. The study didn't determine the causes of that discrepancy, but Labiner suggested a number of factors could be involved, including language, acculturation factors, stigma or a reflection of the "healthy immigrant effect," which suggests that in order to travel, an immigration population is naturally more healthy than the general population.

Labiner, along with Jenny Chong, research associate professor of neurology, is participating in follow-up and related studies that may provide more insight on the unexpected findings. One, again funded by the CDC, examines seizures in an older population, which may exclude more recent immigrants, for Hispanics versus non-Hispanics, while another involves a collaboration with colleagues in Central America to explore that question with different immigrant populations.

"Epilepsy is a fairly common neurological problem but yet it does not get attention like multiple sclerosis or muscular dystrophy," Labiner said. "There are a tremendous number of life consequences associated with having a diagnosis of epilepsy and there's a lot of stigma associated with this disease."

Additionally, the border study found a surprisingly high number of cases in which epilepsy had not been identified in the past.

"We were fairly shocked that a quarter of the people we identified with epilepsy had never been diagnosed or treated," Labiner said. "It's not like there is no proximity to specialists. The areas are not that remote that
you should expect people are going undiagnosed."

Provided by University of Arizona

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