

# Letter to the Editor

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## Letter by Chen et al Regarding Article, “Neurological, Functional, and Cognitive Stroke Outcomes in Mexican Americans”

To the Editor:

We read with interest the article by Lisabeth et al<sup>1</sup> comparing stroke outcomes in Mexican Americans and non-Hispanic whites. In this study, ethnical differences of stroke outcomes in 461 Mexican Americans and 259 non-Hispanic white patients were compared using Tobit or linear regression model.

This letter is devoted to challenging their statistical application of the linear regression model. Linear regression was used to obtain age-adjusted ethnic differences for activities of daily living (ADL) and instrumental ADL subscores and for individual ADLs/instrumental ADLs and items of the National Institutes of Health Stroke Scale. However, the data type of subscores of ADLs/instrumental ADLs and items of the National Institutes of Health Stroke Scale are ordinal data.<sup>2</sup> To be suitable for linear regression, the outcome of interest must be a continuous variable.<sup>3</sup> In this context, ordinal regression but not linear regression may be more appropriate. Furthermore, in Table II in the online-only Data Supplement, it was not appropriate to present National Institutes of Health Stroke Scale item scores as

mean (SD), which should be presented as number (percentage) in different scorings; similar problems also appeared in Table III in the online-only Data Supplement for subscores of ADLs and instrumental ADLs.

## Disclosures

None.

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## Letter by Chen et al Regarding Article, "Neurological, Functional, and Cognitive Stroke Outcomes in Mexican Americans"

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