Author's response to reviews

Title: Restless legs syndrome and functional limitations among American elders in the Health and Retirement Study

Authors:

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Author's response to reviews: see over
RE: MS:  1200095748633776

January 27, 2012

Dear Dr. Pura:

Thank you for providing a detailed review of our manuscript, “Restless legs syndrome and functional limitations among American elders in the Health and Retirement Study”. In response to the reviewers’ questions and recommendations, we made the following changes to the manuscript.

Reviewer #1 (Gao): “Based on the IRLSSG recommendations, the diagnosis has to be based on ALL four criteria. However, the questions asked failed to include one of them: “Improvement with activity”. Furthermore, RLS should be “Worsening in the evening or night”. However, the investigators failed to ask whether the symptoms were worsen during night/evening, compared with day time.”

Response: We agree that use of the standardized case definition would improve the classification of RLS. However, this survey was conducted prior to (2002) the established recommendations (Allen 2003). Although we previously mentioned this in the methods section, we added the following text to the discussion session:

“Standardized diagnostic criteria suggested by the International RLS Study Group [2] were not strictly applied, but our case definition included the essence of the core diagnostic criteria at least weekly. Our case definition did not require the characteristics of movement providing symptom alleviation or that the symptoms worsen at night, which are considered diagnostic criteria for RLS. However, the questions did specify that the symptoms were present at rest.”

Reviewer #1 (Gao): “This would introduce misclassification of RLS diagnosis. It is suggested by the high prevalence of RLS (10.6%) observed in this population.”

Response: Although it is true that our classification structure would tend to over-diagnose RLS, the magnitude of this misclassification is relatively small. Several other studies had prevalence estimates of 10%. We should limit the generalizability to only those in the age groups represented by HRS, so the following text was added to the limitations paragraph:

“Our prevalence was consistent with other studies in elders, but extrapolation of our findings should be limited to those aged 54 or older.”

Additionally, our prevalence estimate does not differentiate primary from secondary RLS, so this clarification was added:
“The prevalence estimates are consistent with other reports, although we were unable to classify patients with primary versus secondary RLS.”

Reviewer #1 (Gao): “Another concern is that the investigators failed to adjust for baseline ADL/IADL status for their prospective analysis. Baseline physical function is the most important predictor of risk of disability.”

Response: Although baseline function is a predictor of future risk, we felt that restricting the prospective analysis to only those without a given disability at baseline helped alleviate this concern. We did not specifically look at progression of disability. Also, we did not adjust for related baseline impairments (e.g., controlling for mobility limitation at baseline when examining incident ADL limitations), because of the concern of over-adjustment.

Reviewer #1 (Gao): “The investigators also need to conduct subgroup analysis for men and women as a big gender difference of RLS has been seen in previous studies.”

Response: Although there are gender differences, with females having a majority of cases by our definition (70%), we felt that our total sample size was too small to adequately investigate in a stratified analysis. There were no significant gender interactions in the risk factor assessment (model shown in Table 3).

Please feel free to contact us with any further questions or needed clarifications. We appreciate the thoughtful comments by the reviewers.

Sincerely,

Dominic J. Cirillo