**Objective**

To evaluate the economic burden of restless legs syndrome (RLS) and RLS severity on health-related quality of life (HRQoL), work productivity, resource use, and direct and indirect costs.

**Introduction**

RLS (also known as Willis-Ekbom disease) is a neurologic disorder characterized by unpleasant sensations in the legs along with an urge to move them, sometimes unaccompanied by objective evidence of movement.  

A few studies have documented the burden of RLS with HRQOLs and some have examined economic-related outcomes.  

However, these studies have either relied upon old data or used nonrepresentative, small, or old data, or did not use a suitable control group to adequately quantify the incremental burden of RLS. Our study sought to address these limitations in the literature.

**Methods**

**DATA SOURCE**

This project includes data from the 2012 US National Health and Wellness Survey (NHWS; N=71,141).

**SAMPLE**

All respondents from the NHWS were eligible for inclusion in the analyses (N=71,141). However, those patients who responded “Don’t know” to questionnaires that did not indicate a diagnosis were excluded from analyses (n=216). Analysis of these patients’ results and the percentage of non-applicability of data to the exception that adequately define the proportion of patients who were excluded for the purposes of this poster.

**MEASURES**

RLS and RLS severity: Respondents who reported that they had been diagnosed with RLS (n=2390) were included in the RLS group; those who did not report a diagnosis were considered controls (n=2390). Among those who had been diagnosed with RLS, 257 respondents were excluded during the matching process owing to the inability to match them with the controls with proper demographic representation.

**Burden of RLS**

Disease severity levels (mild vs moderate vs severe) were determined using the 2007 American Academy of Sleep Medicine (AASM) classification.

**Statistical Analyses**

Chi-squared tests and one-way ANOVA (ANOVA) were used to examine differences between patients with RLS and matched controls.

Respondents with RLS were significantly more likely to be on disability (15% vs 7%, p<0.05) compared with matched controls. Among those employed, significantly greater levels of absenteeism, presenteeism, and overall work impairment were also observed in patients with RLS.

**Burden of RLSSeverity**

When comparing different levels of RLS severity, the likelihood of being female, being non-Hispanic white, having less than average college education, having an income less than $30,000, and not exercising increased concomitantly with increasing severity.

**Discussion**

A significant burden of RLS was observed across both demographic and economic outcomes. Indeed, the differences in these unadjusted costs were clinically significant.

**Limitations**

Data in the NHWS are self-reported and therefore may not be representative of RLS diagnoses (or any other response) among similar patients in the community.

All data are cross-sectional in nature and do not allow causal inferences to be made.

**Results**

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**Results**

**Table 1: Adjusted health outcome means across different levels of RLS severity.**

<table>
<thead>
<tr>
<th>RLS Severity</th>
<th>Control (n=2390)</th>
<th>RLS (n=2390)</th>
<th>Matched control (n=2390)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLS</td>
<td>18.67</td>
<td>21.47</td>
<td>18.78</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>0.67</td>
<td>1.03</td>
<td>0.72</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>2.39</td>
<td>2.81</td>
<td>2.84</td>
</tr>
<tr>
<td>Proportion on disability</td>
<td>0.04</td>
<td>0.14</td>
<td>0.07</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>0.58</td>
<td>1.54</td>
<td>0.57</td>
</tr>
<tr>
<td>Presenteeism</td>
<td>0.71</td>
<td>0.94</td>
<td>0.71</td>
</tr>
<tr>
<td>Overall work impairment (WPAI)</td>
<td>0.58</td>
<td>0.82</td>
<td>0.58</td>
</tr>
</tbody>
</table>

**Discussion**

A significant burden of RLS was observed across both demographic and economic outcomes. Indeed, the differences in these unadjusted costs were clinically significant.

The results of this study are in line with what we examined at the time of this meeting regarding RLS and HRQOL associations among the elderly. However, we believe that there are still gaps in our understanding of the full impact of RLS on health and wellbeing.

**Limitations**

Data in the NHWS are self-reported and therefore may not be representative of RLS diagnoses (or any other response) among similar patients in the community.

All data are cross-sectional in nature and do not allow causal inferences to be made.

**References**


**Figure 1:** Adjusted health outcomes means across different levels of RLS severity.