Antidepressant Use in Patients with Major Depressive Disorder: A Comparison of Treatment Resistant and Non-Treatment Resistant Episodes in the United Kingdom Using the CPRD Database

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INTRODUCTION

- Major Depressive Disorder (MDD) is a globally prevalent chronic mood disorder with a significant disease burden. The Global Burden of Disease 2013 study estimated the global prevalence to be 25.3 million cases in 2013, which was ranked third, with a mean of 18.3 billion YLDs (years lived with disability), which represented a 53% increase from 1990, when it was ranked sixth in the Global Burden of Disease 2013 study.
- The economic burden of MDD is also a significant contributor to the total annual cost of depression in Europe in 2004. It was estimated to be €118 billion, with direct and indirect costs totaling €42 billion and 74 billion euros, respectively.
- A subset of patients with MDD is characterized as Having Treatment Resistant Depression (TRD), with the European Union Committee for Proprietary Medicinal Products (EMPP) stating that a patient is considered a treatment-resistant (TR) when consecutive treatments with two different antidepressant products, used for a sufficient length of time at an adequate dose with adequate affirmation of treatment adherence, fail to result in a clinically meaningful improvement.
- The clinical and economic burden of TRD is significantly higher than that of MDD.
- Prevalence of comorbidities including anxiety disorders, chronic pain, and fibromyalgia was significantly higher in patients with TRD (23.1%, 4.3%, and 3.6%, respectively) than in non-TRD patients (12.6%, 14.5%, and 3.0%, respectively).
- Costs of medical services associated with TRD were reported to be more than twice those associated with MDD ($10,954 vs $5,025).
- Patients with TRD have been found to be twice as likely as those with MDD to be hospitalized, with health care costs for hospitalized TRD patients being 2.5-fold higher than for non-TRD patients.
- We analyzed the use of antidepressants (AD) during TRD and non-TRD episodes among MDD patients in the UK Clinical Practice Research Datalink (CPRD) between 2000 and 2012.

RESULTS

- Of the 217,407 unique MDD patients for whom data were available, 136,795 (63.3%) were retained, while 80,612 (36.7%) were excluded because they lacked an index diagnosis, met on exclusion diagnosis criteria, did not meet age criteria, or had missing age or gender information (Table 1).

Table 1: Patient Inclusion and Exclusion Data

<table>
<thead>
<tr>
<th>Number of Patients</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of patients for whom data was available</td>
<td>217,407</td>
</tr>
<tr>
<td>Number of patients included</td>
<td>136,795 (63.3%)</td>
</tr>
<tr>
<td>Number of patients retained for the analysis</td>
<td>120,472 (51.1%)</td>
</tr>
</tbody>
</table>

- In one of 17 (15.1%) distinct MDD episodes with one or more ADAP prescription, treatment was withdrawn, while 22.5% (9.5%) of all MDD patients experiencing at least one TRD episode (Table 2).

Table 2: Proportion of TRD Patients and Episodes by Age and Gender

<table>
<thead>
<tr>
<th>Age (in years)</th>
<th>Gender</th>
<th>Proportion of TRD patients and episodes (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-35</td>
<td>Male</td>
<td>37.6%</td>
</tr>
<tr>
<td>36-50</td>
<td>Female</td>
<td>31.8%</td>
</tr>
<tr>
<td>51-64</td>
<td>Male</td>
<td>20.4%</td>
</tr>
<tr>
<td>65+</td>
<td>Female</td>
<td>10.2%</td>
</tr>
</tbody>
</table>

- While TRD episodes lasted more than three years on average, non-TRD drug treated episodes lasted only one year (367±367). The mean duration of a TRD episode was 1,220 days versus only 305 days in the case of non-TRD episodes.

CONCLUSION

This analysis of data from the largest provider of health care in the United Kingdom highlights the significant burden of TRD on both patients and providers.

REFERENCES


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