BACKGROUND

United States has the highest prevalence of overweight (68%) and obese (33.8%) individuals among all developed countries.1

Approximately 16.5% of the annual US medical expenditure ($1.66 trillion) is attributed to obesity. The annual medical costs for an obese individual were $2,826 (in 2005 dollars) higher compared to non-obese individual.2,3

According to National Heart, Lung and Blood Institute (NHLBI) guidelines, pharmacotherapy is recommended for patients who meet medical criteria.4

The national trend in anti-obesity medication use after year 2002 is unknown and it is important to understand anti-obesity medication use over time. It helps us to understand the role of pharmacotherapy in obesity management.

RESULTS

NATIONAL TRENDS IN ANTI-OBEISITY MEDICATION USE FROM 2002 TO 2007

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Table 1: Data description from year 2002 to 2007

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of adults</td>
<td>204,810,561</td>
<td>207,137,152</td>
<td>209,701,862</td>
<td>211,955,654</td>
<td>214,629,716</td>
<td>216,704,924</td>
</tr>
<tr>
<td>Adults who met MC*</td>
<td>69,098,684</td>
<td>60,982,730</td>
<td>65,443,702</td>
<td>67,731,861</td>
<td>69,236,756</td>
<td>72,826,017</td>
</tr>
<tr>
<td>(28.85%)</td>
<td>(29.44%)</td>
<td>(31.21%)</td>
<td>(31.95%)</td>
<td>(32.36%)</td>
<td>(33.61%)</td>
<td></td>
</tr>
<tr>
<td>Adults taking anti-obesity medications</td>
<td>535,737</td>
<td>542,569</td>
<td>462,369</td>
<td>424,931</td>
<td>520,239</td>
<td>767,951</td>
</tr>
<tr>
<td>(4.16%)</td>
<td>(4.19%)</td>
<td>(4.52%)</td>
<td>(4.87%)</td>
<td>(5.05%)</td>
<td>(7.42%)</td>
<td></td>
</tr>
<tr>
<td>Adults taking anti-obesity medication who met MC*</td>
<td>298,615</td>
<td>311,342</td>
<td>294,761</td>
<td>292,027</td>
<td>311,241</td>
<td>544,323</td>
</tr>
<tr>
<td>(0.51%)</td>
<td>(0.51%)</td>
<td>(0.45%)</td>
<td>(0.43%)</td>
<td>(0.45%)</td>
<td>(0.75%)</td>
<td></td>
</tr>
</tbody>
</table>

*MC = Medical Criteria

Analysis of multiyear data showed no statistically significant trend (p-value = 0.25) in anti-obesity medication use among adults who met medical criteria from 2002 to 2007; less than 1% of eligible population were using such medications.

The use of anti-obesity medications by adults who did not meet medical criteria ranged from 31% to 36% from 2002 to 2006.

On average, of all US adults who were taking anti-obesity medications (N = 542,979), 31.98% did not meet medical criteria for use.

DISCUSSION

Absence of a statistically significant change in the anti-obesity medication use might be attributed to the relative stability in the obesity prevalence in the last 10 years.6

Possible other reasons for the lack of change in anti-obesity medication use from 2002 to 2007 are: few drug choices, potential side effects, modest effectiveness and higher price of anti-obesity drugs.

Given the high rates of severe side effects, medication use by adults who do not meet the medical criteria is a matter of concern.

LIMITATIONS

In MEPS, height and weight were self-reported; hence we cannot rule out the possibility of measurement or reporting errors.

We could not identify people with sleep apnea from the database as they were coded within obesity disorders.

CONCLUSIONS

Less than one percent of eligible adults used anti-obesity drugs in each year and anti-obesity medication use did not change from 2002 to 2007.

Almost one third of anti-obesity medication users did not meet medical criteria.

Future research should identify factors associated with the use of anti-obesity medications among adults who do not meet the medical criteria which would help understand such use and reduce it medically inappropriate.

REFERENCES


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