Income Growth Trajectory For Parents Of Children With Down Syndrome In The United States

Citation

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Accessibility
**Background**

- The non-invasive prenatal screening (NIPT) test, available as of October 2011, allows couples to learn whether their fetus has Down syndrome (DS) as early as 9 weeks into gestation.
- Given the availability of this test, more couples are expected to receive a prenatal DS diagnosis.
- Some couples may be concerned about the financial impact of having a child with DS.
- Previous research has examined the impact of having a child on parental earnings. Our knowledge, no research has examined the impact of Down syndrome on the income growth trajectory of parents of children with DS as compared to parents of children without a chromosomal abnormality.

**Methods**

**Data**

- Data from the OptumHealth reporting and insights employer-based claims database were used to conduct this retrospective cohort study.
- The database contains administrative claims and pharmacy claim data and eligibility information for over 18 million members who were enrolled in OptumHealth plans and insured through their employer, including primary subscribers and their covered beneficiaries.
- Annual incomes adjusted to 2015 USD using the Consumer Price Index.

**Selection Criteria**

- Parents were selected to be included in the study if they were enrolled in their employer’s plan during the first quarter of 2015 and had been in the same plan for at least the first three quarters of 2014.

**Observation Time**

- A panel of pairs of consecutive years of parents’ income information was created. Parents with more than two consecutive years of income data were included.
- Parents in the control group with multiple spouses were included multiple times within the parent cluster.

**Study Objective**

To determine the relationship of income growth among parents of children with DS differs from that among parents of children without chromosomal conditions.

**Results**

<table>
<thead>
<tr>
<th>Year</th>
<th>High DS Study Panel</th>
<th>Low DS Study Panel</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>5,676 (33.3)</td>
<td>1,235 (7.2)</td>
<td>&lt;.001 *</td>
</tr>
<tr>
<td>2016</td>
<td>5,676 (33.3)</td>
<td>1,235 (7.2)</td>
<td>1.000</td>
</tr>
<tr>
<td>2017</td>
<td>5,676 (33.3)</td>
<td>1,235 (7.2)</td>
<td>1.000</td>
</tr>
<tr>
<td>2018</td>
<td>5,676 (33.3)</td>
<td>1,235 (7.2)</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Discussion**

- Parents of children with DS have lower mean annual income growth compared to those of children without chromosomal condition. This difference was not statistically significant among mothers and fathers when analyzed separately.
- Using the 2000–2011 time period, the annual income growth among parents of children with DS was smaller. Despite this difference in income growth across the 25-year analysis period, the difference in annual growth rates was not statistically significant.
- The current study focused on income data for plan subscribers, and the findings may not be generalizable to the income growth trajectories of parents of children with DS.
- The current study evaluated only the impact of having a child with DS on parents’ income growth.