Prevalence of Asthma Among Disaggregated Asian American adults 2006-2018
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Introduction
1 in 13 people in the United States experience Asthma

Asthma is a complex chronic lung condition that is characterized by chronic inflammation of the airways. As of 2022, the prevalence of asthma in adults in the United States was 8.4%. Asthma prevalence in seldom studied in Asian Americans. Our hope is to bring light to the distinct lack of research into Asian subgroups with asthma as well as establish why asthma disparities exist.

Objective: To characterize the prevalence of asthma-associated outcomes among disaggregated Asian American subgroups from 2006-2018.

Methodology

**NHWs**
- **7.9%**

**ASIANS**
- **Chinese**
  - 4.0%
- **Filipino**
  - 6.54%
- **Asian Indians**
  - 3.34%
- **Other Asians**
  - 4.74%

These minority groups make up 6.6% of the study population.

We studied asthma prevalence among sample adults in 4 different non-Hispanic racial/ethnic minority groups by using the logistic regression model.

2006-2018 NHIS database: Chinese, Filipino, Asian Indians, and Other Asians

Variables of interest: demographic, socioeconomic, and health variables.

Asthma-associated outcomes: still having asthma, having asthma attack, visiting the ER, and ever having asthma

Results

<table>
<thead>
<tr>
<th>Race</th>
<th>Odds Ratio for Asthma Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Asian</td>
<td></td>
</tr>
<tr>
<td>Filipino</td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td></td>
</tr>
<tr>
<td>Asian Indian</td>
<td></td>
</tr>
</tbody>
</table>

Controlling for BMI, Nativity, Smoking and health insurance

Controlling for Sex, Diabetes, BMI and family income

Key Take Aways and Limitations
- Among disaggregated Asian American subgroups, Asian Indians have the lowest prevalence of currently having asthma and Filipinos have the highest prevalence.
- Asian Americans have a lower prevalence of asthma compared to non-Hispanic whites.
- Asian BMI differs than the standard scale of BMI
- Study was subject to survey and sampling biases.

Conclusion

Our study has major clinical relevance in asthma-associated outcomes between disaggregated Asian American subgroups. Specifically, Filipinos demonstrated the highest prevalence of asthma, but the lowest odds of having asthma when controlled for BMI. These observations confirmed Filipino subgroups do not naturally have higher prevalence of asthma; however, obesity may play a major role in asthma-associated outcomes in relation to lifestyle management. This highlights the importance of disaggregating Asian American ethnic groups as the variations in asthma outcomes has major implications in precision medicine public health interventions.