Knowledge Assessment of “Addendum Guidelines for the Prevention of Peanut Allergy in the United States” Among Pediatric Primary Care Providers

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Abstract
- Anonymous survey emailed to family medicine, pediatric and medicine pediatric residents and primary care faculty/staff physicians, residents, nurse practitioners and physician assistants
- Distributed in the Fall of 2018 at two academic centers in Michigan
- Analysis with binary regression

Background
- Learning Early About Peanut Allergy (LEAP) study demonstrated that early introduction of peanut in high risk infants was associated with a reduction in peanut allergy.1
- In 2017 the NIAID addendum to their previous 2010 guidelines, encouraged early introduction of peanut in higher risk infants at 4-6 months of age when appropriate.2
- This is markedly different from previous guidelines in 2004 that recommended the delay in introduction of peanuts until 3 years of age.8
- Other key changes include identifying patients with severe eczema and egg allergy to be high risk for peanut allergy

Methods
- 210 survey responses, response rate = 35%
- Most common incorrect response (53%) recommended at home introduction of peanuts in an infant with a history concerning for egg allergy
- Adequate knowledge scores (≥ 5/7 answered correctly) was associated with awareness of the guidelines p=0.01, OR 2.98 (CI:1.34-6.60); completing residency in the last 1-5 years p=0.03, OR 3.60 (CI:1.14-11.35), and affiliation with the Medicine-Pediatric program, p=0.04 OR 4.59 (CI:1.07-19.65).
- Attending a peanut allergy focused conference/lecture and participation in an allergy elective were not associated with adequate knowledge scores.

Results

Percentage of correct survey responses per topic

<table>
<thead>
<tr>
<th>Topic</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Earliest age for peanut introduction</td>
<td>60.0%</td>
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<tr>
<td>Assess developmental readiness prior to peanut introduction</td>
<td>80.6%</td>
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<tr>
<td>Recognize symptoms of an allergic reaction to peanut</td>
<td>84.8%</td>
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<tr>
<td>Association of peanut and egg allergy</td>
<td>47.0%</td>
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<tr>
<td>Association of severe eczema and peanut allergy</td>
<td>65.60%</td>
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<tr>
<td>Recomend home/office peanut introduction in a high risk patient with normal peanut-specific IgE</td>
<td>68.3%</td>
</tr>
<tr>
<td>Recomended peanut avoidance and allergy specialist referral in a patient with elevated peanut-specific IgE</td>
<td>70.9%</td>
</tr>
</tbody>
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References

Discussion
- There is inadequate awareness of the updated guidelines in the primary care community
- Resident education on the updated guidelines appears to be an opportunity to improve awareness in a structured, academic setting
- Further studies are needed to assess knowledge of these guidelines in community primary care physicians and the implementation of the guidelines into clinical practice