FUNGUS AMONGUS- Testing the Public’s Ability to Identify Mushrooms

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Background

- Identifying potentially poisonous mushrooms over the telephone can be a difficult task for poison specialists.
- Risk assessment is ultimately dependent on the ability of callers to provide details regarding the color and anatomical features of the given mushroom.
- This study was designed to test the public’s capacity to correctly identify mushroom anatomical parts and toxic vs. non-toxic mushroom species.

Methods

- A booth with a variety of poisonous and non-poisonous mushrooms was set up at a public park during an annual mycological society “fungus faire”.
- Mushrooms for identification were selected with the assistance of mycologists associated with the faire.
- Random, voluntary participants were asked:
  - to estimate their level of mushroom familiarity (high, moderate, low, little or none)
  - to look at a large mushroom specimen and point to the: cap, ring, cup, gills, stem
  - and to identify the 2 toxic species (Clitocybe illudens and Entoloma ferruginans) out of a group of 6 mushrooms.

<table>
<thead>
<tr>
<th>Level of Familiarity</th>
<th>Cap</th>
<th>Stem</th>
<th>Gills</th>
<th>Ring</th>
<th>Cup/volva</th>
<th>ID at least one toxic species</th>
<th>ID both toxic species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little or none (N=61)</td>
<td>53%</td>
<td>58%</td>
<td>49%</td>
<td>35%</td>
<td>32%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Low (N=27)</td>
<td>25%</td>
<td>26%</td>
<td>25%</td>
<td>19%</td>
<td>18%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate (N=20)</td>
<td>20%</td>
<td>19%</td>
<td>20%</td>
<td>18%</td>
<td>16%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>High (N=8)</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>6%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Results

Of the 116 individuals surveyed, 61 had little or no familiarity with mushrooms, 27 had some, 20 had a moderate amount and 8 had a lot.

Conclusion

- Most individuals were able to correctly identify some of the important anatomical features of a mushroom, but not all.
- The majority of people, regardless of their level of familiarity could not identify both of the toxic specimens.
- Future educational efforts may need to focus on informing the public about local toxic mushroom species as well as mushroom anatomy so that callers to a poison center can properly describe the characteristics of an ingested mushroom.