DECREASING CARDIOVASCULAR RISK WITH HYPERTRIGLYCERIDEMIA TREATMENT: THE IMPACT OF MEDICAL EDUCATION ON PHYSICIAN UNDERSTANDING OF OMEGA-3 FATTY ACIDS

**INTRODUCTION**

Triglycerides (TG), although lacking the strong atherogenic potential of low-density lipoprotein cholesterol (LDL-C), are an independent risk factor for cardiovascular disease (CVD). Identification of elevated TG levels in patients with CVD, diabetes, or metabolic syndrome remains a challenge in clinical practice.

CME Activity:
- Panel discussion with leaders on the role of omega-3 fatty acids in the treatment of hypertriglyceridemia
- Devoted to cardiologists
- Posted on Medscape Education

Data Collection:
- Data were collected for all participants from March 6, 2014 to May 11, 2014 for analysis

Linked Learning Assessment:
- Compared pre-assessment to post-assessment responses to the same four questions
- Linked pre-assessment and post-assessment questions allow learners to see their own progress
- Pearson’s chi-squared statistic was used to determine significance of pre-assessment vs. post-assessment responses
- P-values are shown as a measure of significance; if P-values are less than 0.05 then statistically significant
- Effect sizes were calculated for all questions

**RESULTS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Effect Size</th>
<th>Mean (Correct Answers)</th>
<th>Pre-Assessment</th>
<th>Post-Assessment</th>
<th>Overall Percentage of Participants with Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas identified for future education</td>
<td>Understanding the mechanism of action of omega-3 fatty acids</td>
<td>0.796</td>
<td>84% (123)</td>
<td>84% (123)</td>
<td>84% (123)</td>
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<tr>
<td></td>
<td>Understanding the differences between prescription and supplement forms of omega-3 fatty acids</td>
<td>16% (27)</td>
<td>63% (94)</td>
<td>63% (94)</td>
<td>63% (94)</td>
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<tr>
<td></td>
<td>Understanding the pharmacodynamic differences between the different formulations of omega-3 fatty acids</td>
<td>0.973</td>
<td>79% (118)</td>
<td>79% (118)</td>
<td>79% (118)</td>
</tr>
</tbody>
</table>

**Areas Identified for Future Education**
- Understanding the mechanism of action of omega-3 fatty acids
- Understanding the differences between prescription and supplement forms of omega-3 fatty acids
- Understanding the pharmacodynamic differences between the different formulations of omega-3 fatty acids

**METHODS**

**Pre-Assessment**
-Posted on Medscape Education
- Panel discussion with leaders on the role of omega-3 fatty acids in the treatment of hypertriglyceridemia
- Devoted to cardiologists
- Linked Learning Assessment

**Post-Assessment**
- Data were collected for all participants from March 6, 2014 to May 11, 2014 for analysis

**Overall**
- For cardiologists who participated in the CME activity, comparison of responses to statistically linked pre-assessment questions to their respective post-assessment questions demonstrates statistically significant improvement in all four questions (P-values: P<0.05).

**Areas Identified for Future Education**
- Understanding the mechanism of action of omega-3 fatty acids
- Understanding the differences between prescription and supplement forms of omega-3 fatty acids
- Understanding the pharmacodynamic differences between the different formulations of omega-3 fatty acids

**REFERENCES**


This study demonstrated the success of a targeted educational intervention on improving the knowledge and competence of US cardiologists on the role of omega-3 fatty acids to treat hypertriglyceridemia. However, the need for additional education was also demonstrated among cardiologists with regard to understanding the different omega-3 fatty acid formulations and their mechanisms of action in order to effectively use these agents.