Examining the Concept and Measurement of Commercial Bias in CME Programs

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Introduction

• The question of whether commercial influence affects attendees at continuing medical education (CME) events has been a subject of controversy.
• To date, institutional policy changes have focused on industry support of a CME event as the source of commercial influence.¹
• Only three papers have been published that examine the issue, and none of them found significant differences in attendees’ ratings of bias in commercial vs. non-commercially supported programs.²,³

Objectives: To determine, in the absence of commercial support for CME programs
• The optimal way to measure attendees’ perceptions of commercial influence;
• Whether other funding sources contribute to attendees’ perceptions of commercial influence;
• How commercial influence manifests itself.

Methods

Between 2006 and 2007, 867 healthcare provider attendees (Cohort 1) returned on-site evaluation forms from 10 live Massachusetts General Hospital Psychiatry Academy (MGH PA) CME events that were non-commercially supported. For each event, they were asked the questions below: Fig. 1. Bias questions on 2006-2007 evaluations

1. Did you think there was inappropriate commercial pressure? (circle one)
   - Yes
   - Somewhat
   - No
   If you answered ‘Yes’ or ‘Somewhat’, please explain:

2. Did you think that commercial support influenced the course content? (circle one)
   - Yes
   - Somewhat
   - No
   If you answered ‘Yes’ or ‘Somewhat’, please explain:

In 2010 (Cohort 2), attendees were asked about commercial influence in each speaker as well as the entire program at four live MGH PA CME events that were non-commercially supported. We used the more sensitive wording from the 2006-2007 evaluation forms: Fig. 2. Bias questions on 2010 evaluations

1. If you think commercial support influenced the content of the course or any presentations, what types of commercial influence do you think played a role? (check all that apply)
   - Speakers’ funding
   - Overall event funding
   - Hosting institution’s funding
   - Referenced research funding
   - Other (please specify):

2. What areas of the program do you think were affected by this commercial influence (check all that apply)?
   - Course design
   - Choice of speakers
   - Speakers’ mentions of particular pharmaceuticals or products
   - Speakers’ expression of personal opinions about particular pharmaceuticals or products
   - Discussion of generic pharmaceuticals
   - Discussion of negative side-effects of medications
   - Other (please specify):

Results

Question Wording

In Cohort 1, ratings of perceived commercial influence were significantly different for the same attendees within the same program (Fig. 1). This was true whether “Somewhat” was considered an affirmation (McNemar’s test, p < .001) or denial (McNemar’s test, p < .01) of bias. Question 2 was demonstrated to be significantly more sensitive and was used in the 2010 evaluation forms (Fig. 2).

Rates

Combining Cohorts 1 & 2, ratings of perceived commercial influence in the entire non-commercial programs (using the more sensitive question wording) are below: Fig. 3. Bias identification questions on 2010 forms

Identifying Sources and Manifestations of Bias

Using the open-ended responses from Cohort 1 and “Check all that apply” data from Cohort 2 (Fig. 3), the frequency [%] of endorsing each source and manifestation are below:

<table>
<thead>
<tr>
<th>Source of Bias</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speakers’ funding</td>
<td>50 (6.25)</td>
</tr>
<tr>
<td>Overall event funding</td>
<td>15 (1.87)</td>
</tr>
<tr>
<td>Hosting institution’s funding</td>
<td>10 (1.25)</td>
</tr>
<tr>
<td>Referenced research funding</td>
<td>16 (2.00)</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>10 (1.25)</td>
</tr>
<tr>
<td>Course design</td>
<td>60 (7.50)</td>
</tr>
<tr>
<td>Choice of speakers</td>
<td>20 (2.50)</td>
</tr>
<tr>
<td>Speakers’ mentions of particular pharmaceuticals or products</td>
<td>30 (3.75)</td>
</tr>
<tr>
<td>Speakers’ expression of personal opinions about pharmaceuticals or products</td>
<td>40 (5.00)</td>
</tr>
<tr>
<td>Discussion of generic pharmaceuticals</td>
<td>60 (7.50)</td>
</tr>
<tr>
<td>Discussion of negative side-effects of medications</td>
<td>80 (10.00)</td>
</tr>
<tr>
<td>Overall event funding</td>
<td>60 (7.50)</td>
</tr>
<tr>
<td>Choice of speakers</td>
<td>60 (7.50)</td>
</tr>
</tbody>
</table>

Conclusions

• Participants perceived commercial influence in non-commercially supported CME programs.
• Participants comprehend more in the term “commercial influence” than was previously expected.
• Commercial influence can be separated into sources and manifestations of bias in a CME program.
• Asking only about commercial influence in the program overall is not as exact or as sensitive as asking about commercial influence in each lecture.
• Participants’ ratings of the entire program were strongly related to their impressions of individual speakers.
• Participants rate commercial influence significantly differently based upon how the question is asked.
• The lack of findings in previous studies may be caused by differences in methodology.

Based upon this research, we suggest the following to CME providers:

1. Ask about perceived commercial influence from individual lecturers as well as the entire program.
2. Word questions to ask whether there is commercial influence.
3. Prompt attendees to specifically identify the sources and manifestations of commercial influence that they perceive in the program.

References