Reviewer's report

Title: A cross-sectional evidence-based review of pharmaceutical promotional marketing advertisements and their underlying studies: Is what they tell us important and true?

Version: 1 Date: 6 November 2005

Reviewer: Howard Brody

Reviewer's report:

General

This paper addresses an important topic, i.e., the degree of reliance that physicians may place upon information received from pharmaceutical industry sources. Given data that show that the majority of physicians currently receive a good deal of information on pharmaceuticals in this fashion, the question being investigated is highly relevant.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. There does not appear to be any substantial review of existing literature pertinent to this topic, which would arguably include: (a) accuracy of print advertisements and (b) accuracy of verbal communications from pharmaceutical detail representatives as well as (c) accuracy of print promotional materials provided directly to physicians by "reps." Some literature at least is available on (a) and (b). The website, http://www.drugpromo.info/ is an excellent source of material on these topics, at least if published before about 2003, with evidence-based assessments of quality. These authors need to place their findings within the context of this previous literature.

2. The authors need to make more clear how and why they chose to focus on what they eventually did study, that is, printed promotional information/brochures handed to physicians by reps. Why, for instance, did they not study printed advertisements in medical journals or the actual verbal presentation given by reps that accompanied these printed materials? All, arguably, are forms of "DTP" marketing. The authors in some places imply that they have studied ALL DTP marketing when in fact they have looked only at this small slice of the total marketing operation. In particular, given that these printed materials are intended to be used as part of the rep's presentation, and not given to the physician independently, it is unclear what value an analysis of the materials has in the absence of the rep's oral presentation. What if, for example, only 25% of these PAs refer to non-valid studies; but the rep transmits misleading information to the physician on 75% of all encounters? In what way would the level of validity of these PAs indicate anything useful about the reliance physicians place on using the pharmaceutical rep as a source of information?

3. The authors need to explain how they decided that a sample of only 20 PAs was sufficiently powerful for their purposes. To the naive reader this study looks substantially underpowered, especially since many of the disease categories are represented only by a single PA.

4. Table 1 indicates an 8-item instrument to assess an article's validity. Somehow the score on this 8-item instrument was turned into the dichotomous variable, "valid"/"not valid." The authors never explain how this was done.
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

I was surprised to read the figure $6 billion for the total physician marketing effort by the pharmaceutical industry. More typical estimates are commonly given in the $20-25 billion range; and some estimates (e.g., Angell, The Truth About the Drug Companies) argue that the actual sum is closer to $40 billion.

Discretionary Revisions (which the author can choose to ignore)

On p. 9, bottom, the editorial comments about the virtues of the drug industry seem to fly in from out of left field. It is not clear why the authors feel the need for this disclaimer. I would hope that one could agree that the drug industry serves an extremely important social function while still offering criticisms of specific pharmaceutical marketing practices.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.