Reviewer's report

Title: Outdoor Advertising, Obesity, and Soda Consumption: A cross-sectional study

Version: 1 Date: 30 July 2012

Reviewer: Bridget Kelly

Reviewer's report:

This is an interesting paper and concept. My main comment is that more information is required to describe how exactly the modeling/simulation of the impact of advertising on obesity / soda consumption was done. The conclusions and policy implications are valid and useful.

Major revisions

1. The limitations of the study should be further elaborated. What are the implications of only asking about soda consumption for one day (i.e. not usual intake, seasonal variations)? What is the predicted effect of using self-report weight and height? How do the authors suppose these limitations would affect the results?

2. Methods, paragraph 6: I agree that most outdoor food advertising is unhealthy and therefore it may have been acceptable to group all food ads together rather than distinguish healthy vs. unhealthy products. However, this is not well justified in the paper. Further evidence and citations are required. Saying that “most experts would consider…” is inadequate.

3. Methods, paragraph 7: While a greater proportion of ads for food may mean that these dominate the advertising landscape, the use of proportion rather than actual rate or counts of ads can be misleading if there are small numbers of ads overall. E.g. if 100% of ads for food but there are only two ads, then the use of % is meaningless. This needs to be clarified in the paper and effort made to demonstrate that this was not the case in the current study.

4. More detail is needed to describe how this interesting simulation was done to predict obesity and soda intake depending on food advertising predominance.

Minor revisions

5. Abstract: specify that the telephone survey was conducted on adults, and give the age range.

6. Intro, paragraph 1: There are some estimates that TV advertising accounts for approximately 2% of the variance in obesity. This literature should be referenced.

7. Intro, paragraph 3: as well as energy and sugars, high fat and sodium are also of concern. A reference for the statement about differences in obesity prevalence by SES/race is needed.

8. Methods, paragraph 9: is this usual in the USA to designate ‘other’ ethnic
groups as ‘non-minority’? I assume this group is made up of many different ethnic minority groups.

9. Results: query if the reporting of decimal places is necessary as in many cases the numbers being referred to are small.

10. Results, paragraph 3: mixing word “The median household income…”

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests