Reviewer's report

Title: Impact of a parent-child sexual communication campaign: results from a randomized trial of parents

Version: 1 Date: 27 May 2010

Reviewer: Rodolfo Pacagnella

Reviewer's report:

1. Is the question posed by the authors new and well defined?
The question is new and well defined but it is not unique. However, the study represents a good example of how measuring the impact of a mass media strategy in sexual health promotion. It is of great value for United States who has adopted a sexual abstinence strategy to reduce pregnancy and STDs among adolescents. But would be of value for countries that might try and emulate the mass media strategy for sexual health promotion.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
The methods are appropriate for the goals, but there is no enough information regarding the method. The authors refer to another study to explain the sampling/allocation processes; nevertheless the reader should understand the method without the need to read another study.

3. Are the data sound and well controlled?
Yes, however, the control (not exposed) group should be well described/defined.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?
The discussion section could address more from the literature about the issue.

6. Do the title and abstract accurately convey what has been found?
Yes, the title is adequate, but the abstract could be more succinct. It has 354 words and do not address information on trial registration, which is oriented in the Instructions for Reproductive Health authors.

7. Is the writing acceptable?
Yes.

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

1. There is no information regarding trial registration. The authors should inform if the study was registered in any publicly accessible database before recruitment of the first subject.

2. There is no information about ethical issues, as consent inform and board authorization.

3. There is no mention on how sample size was determined. Was the number of subject enough to demonstrate differences in outcomes? Was it overestimated?

4. The randomization processes is not described. All parents (mothers and fathers) were randomized together? When and how the mothers were randomized into normal and booster groups? The authors must address information on method used to generate the random allocation sequence; type of randomization; details of any restriction; mechanism used to implement the random allocation sequence describing any steps taken to conceal the sequence until interventions were assigned; who generated the random allocation sequence; who enrolled participants and who assigned participants to interventions.

5. As this is not a blind RCT, authors must provide information on description of the similarity of interventions in each group. How did the authors guarantee that the not exposed group did not have access to the Ads if they were conveyed freely? Although “PSAs most often appear during donated advertising times with sparse audiences, overall exposure to PSAs is very low” there is a possible exposition in “control group”. This possible bias is not discussed or considered in the manuscript.

6. It is not clear why the number of fathers was different from the number of mothers. Was it because of response rate? How many fathers and mothers were invited?

7. It is not clear how were the surveys conducted, no information on settings and locations where the data were collected. Were they administrated by telephone interview?

8. A flowchart of the allocation processes is necessary to understand the groups formation.

9. There is a need for statistical analysis in drop out rates (results first paragraph and table 2).

10. Table 3 should present the result in absolute numbers instead of only in percentages. There is a need for statistical analysis between groups.

11. Presentations of the 95% CIs in table 4 and in the results section are necessary.

12. The study cannot be extrapolated for the US population and it need to be clear in the discussion secton.

• Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. Third paragraph – Although seven options are described, in table 1 only 3 category options are listed.

- Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore).

Background

1. Second paragraph - The debate on youth-focused abstinence education programs should be better supported with relevant references.

2. Third paragraph - Although there is a lack of approaches to delaying intercourse among adolescents, the National Campaign to Prevent Teen Pregnancy used a similar strategy to reduce teen pregnancy. Would not it be of interest to discuss that campaign here?


3. Seventh paragraph – Suppress the last phrase

Data and Experiment Design

1. To avoid misunderstanding, the name "control group" should be changed to "not exposed group" or similar.

2. Third paragraph - “First, it is well-known that mothers more often engage in sexual communication with their children compared to fathers” - References in here would be helpful.

Measures

1. Regarding the construct validity of the instrument, every last sentence of the variables definitions has data information that would fit better in the results section.

2. Control variable - One variable in the 64-item survey was “school-based abstinence programs”. Would not it be a control variable either? There is no mention of that.

Statistics

1. The last period of the first paragraph would fit better in discussion section.

2. It is important to discuss succinctly the choice for linear regression.

Discussion

1. The difference between response rates among mothers and fathers should be discussed.

Level of interest: An article whose findings are important to those with closely
related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests