Reviewer's report

Title: Alcohol consumption during pregnancy and birth outcomes: the Kyushu Okinawa Maternal and Child Health

Version: 1 Date: 5 January 2014

Reviewer: Michele Drehmer

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Major Compulsory Revisions:
1) The authors have interesting data, but they didn't explored, in discussion, the clinical significance and what represent 1 gram of alcohol consumption/day in pregnancy in terms of public health recommendations. It is difficult to bring and discuss this data. Since no safe level of alcohol consumption has been established, in the literature, at any stage of pregnancy, the current guidelines recommends that pregnant women and women who are planning a pregnancy should abstain from alcohol.

2) The sample was recruited by a convenience method. Why the authors didn't tried to do a probabilistic sample of women that followed prenatal in obstetric hospitals in Japan. Probably the total of 1757 pregnant women was not representative of 423 obstetric hospitals in the eight prefectures.

3) The pregnancy women came from primary care attention? The authors excluded the patients who had pregnancy complications like gestational diabetes, preeclampsia, etc?

4) Where the alcohol questions were in the DHQ? These items were in the beginning, in the middle or in the final list in the DHQ? How the alcohol grams were calculated? In food questionnaire, how many alcoholic beverages were listed?

5) Why authors didn’t use Poisson multivariate regression analysis? The confidences intervals with poisson regression with robust variation could be more precise. It is not clear about the criteria that included variables in multivariate models.

6) A standard alcoholic drink contains approximately 14 grams of alcohol, which is equivalent to 12 fluid ounces of beer, 5 fluid ounces of wine, 3.5 fluid ounces of fortified wine (e.g., sherry or port), or 1.5 fluid ounces of liquor (distilled spirits) (Linus Pauling Institute).

Moderate Alcohol Consumption (as defined by the U.S. Department of Agriculture)
• Women: No more than one standard alcoholic drink/day

Heavy Alcohol Consumption
• Women: 8 or more standard alcoholic drinks/week or 4 or more alcoholic drinks on any given occasion
More moderate alcohol consumption during pregnancy (7-14 drinks/week) has been associated with more subtle effects on cognitive and behavioral development.

The present study used 1 gram as a reference of alcohol consumption. What is the clinical significance of 1 gram of alcohol? How this study can do a recommend with these data?

People often did not consume 1 gram/day. They consume drinks. Maybe, the authors can change 1gram/day by how many drinks per week or per month during pregnancy in discussion.

7) For give more information, a graphic of a J-shaped could better indicate this association between alcohol consumption and obstetric outcomes.

Minor Essential Revisions
1) Do not use this term “monotonically”. Substitute by another word.

Discretionary Revisions
1) In the background, second statement, please inform the magnitude of the association between heavy and light to moderate maternal alcohol consumption and obstetrics outcomes in that described meta-analysis.

2) An inherent limitation was the report of alcohol consumption in pregnancy. Most of the women could not relate alcohol consumption because this habit is frequently not recommended in this period of life. The information about that 86.7% mothers were abstainers during pregnancy could be biased.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.