Reviewer's report

Title: Bisphenol A-associated epigenomic changes in prepubescent girls: a cross-sectional study in Gharbiah, Egypt

Version: 1 Date: 7 February 2013

Reviewer: Lori A Hoepner

Reviewer's report:

Overall, a well written and thorough manuscript which addresses effects of pre-adolescent exposure to BPA, an area in need of further investigation.

Minor Essential Revisions

1) This article leads strongly with the DOHaD hypothesis but there are holes in the logic of the first paragraph taking the reader from DOHaD to adolescent exposures and outcomes. It reads as though pre-adolescent and adolescent exposures are part of the DOHaD hypothesis. The introductory paragraph could use a better transition from DOHaD to adolescence.

2) Please describe and cite the equipment used for field-collected anthropomorphic measurements (lines149, 153-154).

3) line 155 - All 60 girls were pre-pubertal? Please explain how this was ascertained. What is the average age of female puberty in Egypt?

4) While the hypothesis is clearly stated in the abstract, it is missing from the Background section.

Discretionary Revisions

5) lines 299-300 - "Cluster 1...contained more than half of BPA-high samples" - Clarify is the importance that the cluster had >50% high BPA? or that >50% of the high BPA samples were in this cluster?

5) The use of spot urine and the rapid excretion of BPA in comparison to epigenetic changes should be noted as a limitation of the study.

6) The relevance of the reference in line 424 to cohort studies conducted in "relatively healthy populations" is not clear given the current study's subjects are described as "healthy" in line 146.

Level of interest: An article of outstanding merit and interest 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.