Reviewer’s report

Title: Do self-reported pregnancy complications add to risk evaluation in older women with established cardiovascular disease?

Version: 0 Date: 30 Jul 2019

Reviewer: Jennifer Tabler

Reviewer's report:

Review: In women with established cardiovascular disease, do self-reported pregnancy complications add to risk evaluation?

Summary

* Overall, an interesting application of other literature, and an important research question (can we use past pregnancy as an indicator of cardiovascular risk?)

* I cannot evaluate the medical assessment strategies for MSAD or establishing cohorts, as I am not a clinician.

* Tables need to be edited for clarity (Tables should be standalone from the text)

Review

* Small sample of women without CVD should be highlighted more in the limitations—they do mention small sample size, but the non CVD sample is a huge limitation.

* The premise of the paper is built on null or non-findings, but non-findings is much more likely with a small sample size! It is problematic to conclude that previous pregnancy issues provide no additional value—rephrase to "may not". Make sure to moderate suggestions to "may not" "could not" "might not" rather than use such definitive language throughout.

* A p-value of 0.06 is borderline significant, not significant—yet is presented as such in the abstract.

Methodology

* Limitations
Self-report of fertility complications—this is a huge issue given that the time frame for the self-report is so wide. Asking women about something happening up to 20 years ago, is problematic. You address this in the limitations, but should also emphasize that future studies should try to include longitudinal medical histories (non self-report). (Even if something is the "common" way of doing something, doesn't mean it's the way it should be done).

Other covariates (controls) are excluded, highlight the exclusion of education and income which are known to be associated with CVD in your limitations OR include them in your models if you have them (you do mention lack of some controls broadly, but be specific). (examples of papers looking at education/income and cardiovascular disease: Degano et al., 2017 10.1038/s41598-017-10775-3; Khaing et al., 2017 10.1177/2047487317705916)

Tables

* Table 1 is potentially unnecessary — you should describe response rate in-text. You already show the process for sample selection in Figure 1. You are presenting too much in Table 1, limit it to describing your analytic sample in Table 1 (the sample you are actually looking at N=307).

* Table 2 is messy/hard to read—it isn't clear what is or is not a categorical variable, the swinging sample size (n) is needlessly complicated (ns listed for each individual variable)—I suggest listwise deletion on key covariates, since this will be what's presented in multivariate logistic regression models anyway.

Please restructure and clean up your table 2. Also, please footnote analytic strategy to assess differences between CVD and non-CVD samples (independent t-tests, chi-squared, whatever it is) in the Table.

* Table 3 is not standalone. You cannot interpret the Table without going to the body of the manuscript. What results are even being presented? Logistic regression? Correlations? Reader should know this looking at Table 3.

* Logistic regression results are not presented in a Table? Make sure to reference Tables in-text more frequently, so the reader knows what Tables they should look at. It seems like not all the results are actually presented in Tables. You can say (not shown) if you do not create a Table (but standard practice is to present all results in a Table format).

* Grammar, please read through carefully and fix small grammatical errors present in the manuscript. Here are some examples:

Typo in the figure legend for REBUS
Run on sentence on lines 40-45 (When describing the cohorts)

MSAD "is" defined, not "were" defined (it's singular) lines 27-30.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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