Reviewer’s report

Title: Incident cervical infections with high- and low-risk human papillomavirus (HPV) infections among mothers in the prospective Finnish Family HPV Study

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Reviewer: Ly-Mee Yu

Reviewer’s report:

The authors have improved the manuscript further. However, the authors have not fully addressed some of the issues I raised earlier:

1. Interval censoring – since all participants were followed up at a fixed time point, i.e. 2, 12, 24, 36 months and 6 years after recruitment, the time to an incident event was likely to be clustering around those time points. This is clearly demonstrated in Figure 3 of the manuscript. The authors should address the issue in the manuscript.

2. Censoring the first incident event - the authors have clarified in the rebuttal that there was no censoring of the first event, but this contradicts to what is stated on Page 7 of the manuscript.

3. Page 9 – it is stated that variables that were significant were included in the multivariable model but results reported in Table 2 indicate that variables were selected if significance was found in sub-category of a variable. For example, a statistical significant difference between 3-5 partners and 1-2 years in ‘life-time number of sexual partners’ does not necessary imply the variable itself is a significant predictor of HPV (species 7 and 9-type specific) infections incidence.

4. I am not clear how follow-up questions can be used as predictors of HPV incidence. Especially, we don’t know if the incidence occurred before or after these follow-up questions were collected. The Poisson model, described by the authors, fitted these questions as fixed effects. This ignores the time distinction between the questions collected at baseline and during follow-up. I would like to stress that what is not available in STATA does not mean no such method exists.

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:

None