Reviewer's report

Title: Distribution of cervical intraepithelial neoplasia on the cervix in Chinese women: pooled analysis of 19 population based screening studies

Version: 3
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Reviewer: edyta ECP pirog

Reviewer's report:

Major Compulsory Revisions
Abstract/Introduction
Line 8 “whether” should be either
Line 12 “included for” should be included in
Line 35 reference 11 is available in the abstract format only, and statements made in the abstract cannot be scrutinized against the data, it is better that such reference is removed
Line 45 ref 14 and 15 has no data pertaining to controversy of topography distribution
Line 45 different studies identify quadrants in different way, see ref 21. There are several prior studies which reported that lesions are most commonly identified at 12 and 6 o’clock position, therefore cervical quadrants are most often designated as anterior, posterior, left and right.
Line 53 ref 22 does not provide an evidence for what is written in this sentence
Line 54 ref 23 has no context in this paper, in ref 24 data presented by authors do not support paper conclusions
Line 57 the sentence requires ref 17 and comment that this opinion is controversial, considering prior data published on the topic, refs 19-22 and R.M. Richart, Cancer, 18 (1965), pp. 950–954, and also the findings of this study.

Methods
Study design problem- There are several prior studies which reported that lesions are most commonly identified at 12 and 6 o’clock position, therefore designating cervical quadrants as 12-3, 3-6 etc. obscures the results, and random biopsies at 2, 4, 8, or 10 o’clock from such designated quadrants may completely miss the lesions. The results from this study in table 2, fig 1 and 2 demonstrate just this, that random biopsies at 2, 4, 8, or 10 o’clock miss lesions.

Results
The results of directed biopsies taken from 12 o’clock cervical locations (current table 3) are the most reliable, show non-random distribution of the lesions, and should be presented first. Results from random quadrant biopsies (current table
2, fig 1 and fig2) show that taking multiple random biopsies at 2, 4, 8, or 10 o'clock does not increase detection of cervical dysplasia. This finding should be strongly emphasized in the discussion, conclusions and recommendations.

Figure 2 legend - there are two red colors which are difficult to distinguish in the figure, the color palate should be changed

In summary the manuscript requires significant re-editing. The introduction section requires meticulous verification of the references quoted. Results section should be rearranged and discussion rewritten to better emphasize significance of the results.

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

Quality of written English: Needs some language corrections before being published

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'