**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  **Date:** 12 March 2015

**Reviewer:** Yaser Hussein

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Yaser Hussein’s comments:

The study by Zhao et al tackles a subject that is of considerable interest to gynecologists. Briefly, the authors studied the topographic distribution of cervical intraepithelial lesions by a retrospective analysis of 19 population based studies. The investigators found that high grade squamous intraepithelial lesions (CIN2 and CIN3) are more prone to occur in the posterior portion of the cervix (2nd and 3rd quarter) and more commonly affect certain o’clock locations. The study is well designed and the results are nicely presented in an organized manner; however, the manuscript would be significantly improved by greater precision and clarity with respect to the writing in general. I will give few examples:

1- The word “on the surface of the cervix” was used multiple times in the manuscript including the abstract and introduction. “on the cervix or across the cervix” might be more precise.

2- In the abstract: participant received whether 4-quadrants random biopsy or directed biopsy (row 8)....

3- In the abstract: By pathological diagnosis (row 14).

4- In the abstract, row 15 and 17: Instead of using more often and least often, factual results should be listed here.

5- In the introduction, row 52-53: “A pathological examination of the entire cervix on hysterectomy specimens found increased prevalence of glandular intraepithelial neoplasia, highly correlated with CIN, on the posterior cervix” This is not prevalence. The Heatley study (ref no. 1) found that there is higher frequency of glandular intraepithelial lesions on the posterior and anterior portions of the cervix. Reference no.2 (see below) can also be added here, which showed higher frequency of CIN lesions on the posteriori and anterior portions.

6- Material and methods: Were the indications for colposcopically directed biopsies the same across the different cohorts? If not, then this should be mentioned in the discussion as one of the limitations of this study.

7- Discussion/Conclusion: The main conclusion of the study is that there is a topographic distribution pattern of CIN2 lesions and that in the event of equivocal colposcopic changes in the cervix, quadrants 2 and 3 should be preferentially targeted during biopsy. I think this is a strong statement based on the data presented in this paper. If this is the case, why there was no topographic
predilection for CIN2/CIN3 in the random biopsy group? Could this due to the small percentages of CIN2 and CIN3 in this group? I think this point should be explained in the discussion.

References:


Level of interest: An article of importance in its field

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.