Reviewer's report

Title: Teaching evidence based medicine literature searching skills to medical students during the clinical years - a protocol for a randomised controlled trial

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Reviewer: Harold P Lehmann

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I appreciate the efforts made by the authors and the filled-out Consort statement.

I am afraid I am still confused between the goal ("to identify the optimum time for educating medical students in evidence based medicine literature searching skills – be it their pre-clinical years of the degree or when students are exposed to clinical practice," as restated in the Discussion, and the design. If the goal really were to test whether having the workshop in the 3rd year or in the clinical years, the design would be:

3rd year: Workshop vs Control..(1)...Clinical year: Control vs Workshop..(2).

(i.e., those given the workshop in year 3 get the Control in the clinical year), with the Fresno and EBPQ administered at least at point (2), if not at point (1) as well. The trial would not end until point (2).

The Figure on p 8 suggests this design, but does not clarify the point at which the Fresno/EBPQ is given, and makes it sound like the workshop is given to everyone in the clinical years, "at the end of the trial." Generally, trials don't end until after the outcome has been assessed. (Perhaps the authors simply meant, "after the interventions"?)

Second, with the sample sizes as calculated, there is not a lot of room for regressions (each confounder potentially double the sample size.) The authors themselves point out that country of origin is a possible confounder (even if the Malaysians speak English well)...There may be other confounders (prior exposure to EMB principles, prior research experience) that should be elicited and checked, at least, through 2x2 tables or t tests. If the sample size (and the effects) are large enough, regressions might be possible.

As described, it is not clear when the

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

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 interest