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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The author pose the question: “No studies to date have investigated when such EBM programs should be delivered to medical students – either in the pre-clinical years, or during years in which students are based in a clinical environment.” And again in the Discussion: “identify the optimum time for educating medical students in evidence based medicine literature searching skills”

This question suggests a comparison of 4 groups; pre-clinical EBM/no EBM vs clinical EBM/no EBM (or 3, deleting clinical/no EBM for ethical reasons). Their implied outcome comes later: able to implement [searching the literature or critically appraising evidence] throughout their clinical years. Outcomes should be assessed immediately after “treatment” and then again in the clinical years (fifth year?).

Haven’t workshops been studied a lot? Shouldn’t we be looking at workshop + reinforcing environment (e.g., library resources? Journal clubs?)? Are there such confounders already in place? MMMMMM

Following the flow of participants in the study:

1. Population: The authors should say something about what other sorts of medical students are similar to Monash students.
2. Baseline: The groups should be assessed, especially since they took the first-year class. Are there other student attributes that may serve as confounders? The authors mention specific potential confounders: clinical maturity, perceived relevance in the clinical environment and continued practice within this context may influence a
   1. student’s competence in EBM skills.
   2. Randomisation: Should the sites use block randomization, to address site effects.
   3. Control: Is it ethical for some students to get no EBM training?
   4. Sample size: What’s important is the difference that the authors think is meaningful and the SD of the data, not what difference was found to be statistically significant.
   5. Analyses: Regression could also be done using confounders (and site) as independent variables, in addition to “treatment” condition.
p 6: “Students who are unable to understand English”: Are there really such students matriculated in an Australian medical school?

P 7: “this study will by”: “…will be…”