Reviewer's report

Title: Effect of a one-person CRM team leader training on team performance and leadership behavior in simulated cardiac arrest scenarios: A prospective, randomized, controlled study

Version: Date: 22 December 2014

Reviewer: Dimitrios Siassakos

Reviewer's report:

Major Compulsory Revisions

Results that are clearly statistically (and also conceptually/clinically) insignificant should not be discussed as being different...

The abstract should not just contain p values but also measures of effect size with their confidence intervals or other estimates of precision.

The authors should comply fully with the detail of the CONSORT guideline; they have not, and some examples are mentioned below.

The limitations of quasi-randomisation (bias) should be discussed.

p - values / stat. tests to compare descriptive data at baseline should never be used in either observational or RCT studies (CONSORT & STROBE)

The steps taken to protect allocation concealment should be mentioned

Validation and reliability of the ADH tool should be discussed.

THE MAJOR MAJOR ISSUE HOWEVER IS:

10 teams were excluded after randomisation. Why? It appears that actually some of them (how many?) had been non-compliant with attending lectures etc instead of not fulfilling eligibility criteria (in which case surely they should have been excluded before randomisation??). Therefore, the analysis has not been proper intention-to-treat analysis, therefore it is prone to bias. I would like to see the results compared for all teams as per intention to treat.

Discretionary Revisions

Consider the following manuscripts with regards to establishing shared mental models and leadership in ad hoc teams:


**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I am a researcher in a similar field, a member of the PROMPT maternity foundation, and co-director of simulation courses, but none of these pose a direct conflict of interest, nor do I have any financial gains from my involvement in relevant activities.