Reviewer’s report

Title: Evaluation of the impact of a brief educational message on clinicians’ awareness of risks of ionising-radiation exposure in imaging investigations: a pilot pre-post intervention study

Version: 0 Date: 03 Aug 2019

Reviewer: Siew Yim Loh

Reviewer's report:

A much needed study and timely due to the changes in usage of diagnostic radiography investigation.

The study evaluates the impact of a brief educational message on clinicians' awareness of risks of ionising-radiation exposure in imaging investigations: an intervention study

Main comment:

1. Title should include A pilot pre-post intervention study

2. Intro and method were described.

3. Result:

Table 1: what is the purpose of this?.

Author needs to show that the sample is valid for the study, and representative across background. Does the sample has representation from key grades, disciplines, demographic of all who will be using/prescribing imaging

Baseline no of consultant was 78, follow up was 107- how did they get this increase? did they follow a cohort ie the n=170 from baseline till post test?

Table 2: please clarify if this table is based on the n=170 who responded or based on 83.7% of the 170 -who saw the message?

You should removed those who did not see the message -report in your demographic but the analyses should be based on those who saw the message as you are testing the effect of your message intervention. No point including those who did not even see the message/intervention.

this para needs clarification=="Following exposure to the intervention for one year 83.7% of respondents indicated that they had noticed the educational message (Table 2). There was a statistically significant improvement in their (this refers to the responses from all or from those who saw the message???)estimates of the long-term health impacts of ionising radiation
exposure (p < 0.001); an increase from 22.4% to 38.1% of respondents (same comment here!!), estimating the risk as approximately 1 in 300 for a 20 year old female (same comment here!!)(Table 2)

4. Discussion: Over a third (35%) of (the 31% respondents, ie n=170) had received NO (!!) formal education on the risks of exposure to ionising radiation reported in abstract. Yet, those WHO RECEIVED (!!) formal training on radiation safety with regard to diagnostic investigations were 111 vs 59 (as reported in table 1) -- which is which?? Please clarify 1/3 had or do not have formal training the author should rerun the analyses to see if there is any sig difference in those trained at pre and post survey, ans for those not train- did your simple intervention create a change?? was it significant?

5. Conclusion; over stating the findings since confounders are clear. need to tone down.

Do suggest better future studies to follow through and better recruitment strategy

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Acceptable

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