Reviewer's report

Title: Calibration of dentists for Caries Management by Risk Assessment Research in a Practice Based Research Network - CAMBRA PBRN

Version: 0 Date: 08 Sep 2017

Reviewer: Fernanda Ferreira

Reviewer's report:

This is a study with a simple methodology whose objective is to describe a process of calibration of dentists to perform caries diagnoses based on DMFS and ICDAS indices, as a previous part of a main study that intends to evaluate the feasibility of the implementation of CAMBRA in dental practice. The paper is generally well-written and the result provides supportive evidence for the calibration of dentists on dental clinic practice. However, the authors should attend to some points before publication:

Considering the sections Background and Discussion, they could be reorganized since some pieces of information would be better allocated in other parts of the text. For instance, lines 5-9 (Background) are more appropriate to be in the Methods section, while the first five paragraphs of the Discussion section are more compatible with the Background section. Discussion is too long for this type of study. This section can be improved avoiding the repetition of previously presented results and, on the other hand, deepening the discussion about the limitations of the study. For example, discussing about the clinical implication of the "moderate" agreement achieved for initial caries lesions.

Other specific points that should be addressed in the Methods section are:

How many dentists are working in San Francisco Bay? Which dentists were contacted by phone calls during the recruitment? All of them? How many dentists attended the information meetings about CAMBRA-PBRN study and how were the 30 participating dentists selected among them?

Lines 5-7, page 5: further information about the dentists is needed, e.g. qualifications, experience, etc.

How long was the interval between the training and the calibration sessions for each participating dentist? Did it vary among dentists?
Please clarify which steps from the 6 presented were conducted in the training and which steps were conducted in the calibration session.

There is no need to repeat the same criterion as exclusion and inclusion, so the criterion of "7 natural teeth remaining" applies best to inclusion criteria.

Lines 1-2, page 9: Please exemplify "other conditions that may have decreased the likelihood of their adhering to the study protocol".

Where/how were the patients recruited for the calibration sessions?

Wasn't the intra-examiner reliability assessed?

Please clarify the cutoff points adopted for acceptable kappa values (DMFS, kappa values ≥ 0.75; ICDAS-1 and 2, kappa values ≥ 0.40), e.g. references.

What happened to patients diagnosed with new caries lesions in the calibration sessions?

Why "In the case of a restoration and non-cavitated decay (codes 1 or 2 ...) present on the same tooth surface, the surface was scored as filled (code F), as restorations took precedence over non-cavitated decay"? Won't this underestimate the incidence of new caries lesions in the main study?
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.

Yes

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

Yes

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 am able to assess the statistics

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Please indicate the quality of language in the manuscript:

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