Author’s response to reviews

Title: Enabling Aboriginal dental assistants to apply fluoride varnish for school-children in communities with a high Aboriginal population in New South Wales, Australia: A study protocol for a feasibility study

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Version: 1 Date: 06 Nov 2018

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To the Editorial Team,

Thank you for the comments that the Editor and both reviewers have made on this manuscript. We are very grateful for the time and efforts that have been taken to help us make the paper as effective as possible. We have responded to your comments as below and made changes to, or clarified within, our manuscript accordingly.
Reviewers reports:

Reviewer #1: This is a worthwhile project. The methodology is appropriate. My only concern is whether there are provisions for dental treatment for the participating children where it is needed at any time during the study. Thank you for your comments and feedback. This is a valid point. Yes, children are referred back to the Aboriginal Community Controlled Health Service for dental treatment if untreated carious lesions are detected by the Oral Health Therapist during the Caries Risk Assessment. This has been clarified in line 238.

Reviewer #2: The proposed research protocol is interesting and addresses an important issue. Oral health among Aboriginal children in Australia is poor, and the investigators are applying a new angle (using dental assistants for preventive care delivery) to a well-established caries-preventive intervention (NaF varnish application). My comments on the protocol are minor:

1. It was unclear to which surfaces of the teeth this Duraphat varnish will be applied. The varnish will be applied to the interproximal (in-between) and occlusal (chewing) surfaces of the teeth. These has been clarified in line 248

2. Ages of the children was unclear - at 0.4 mL Duraphat, this might mean not recommended for smaller children. According to my reading, a substantial proportion of Aboriginal children ~8% might be classified as underweight. Children aged 5 – 12 are eligible to receive the varnish. This is stated in line 222. Children aged 5 – 12 years are generally in the mixed dentition phase and 0.4ml of Duraphat is the recommended amount of varnish for this dental phase by the manufacturer.

3. How will the quantity of varnish be controlled at 0.4 mL? Is package fluoride varnish to be used? I am aware that this is sometimes produced in 0.4 mL packages. Fluoride varnish will be dispensed onto a 0.4ml dispensing pad provided by the manufacturer. This has been clarified in line 250.

4. I suggest that these dental assistants are not actually being used as assistants, and so should be termed as dental auxiliaries, which is the nomenclature I am familiar with for this situation. Once the assistant becomes the operator they are no longer an assistant. In the UK, for example, such an operator might be termed an 'extended duty dental nurse'. Thank you for this comment. Whilst we agree that the dental assistants in this project are being used in an expanded role, the term dental auxiliary is a loaded term in the Australian context where it has been used as a loaded term for the description of mid-career level providers. Use of this term in this paper is likely to be construed in a way that we do not wish to convey by an Australian readership.
5. 'Preventive' not 'preventative'. Why the unnecessary syllable? Both are used in the manuscript. Thank you, the word ‘preventative’ appears twice in the manuscript and this has been changed to ‘preventive’. Apologies for this.

6. Lines 152-167 describe some studies where assistants have been used as auxiliary operators, but nothing is said about the success or failure of the actual interventions. Information on the success of these interventions has been added in line 157.

7. Line 171 I suggest the 'ability' not the 'efficacy' is being tested here. This has been changed.

8. The consent form is awfully complicated. Will this be administered by the dental assistant in question? The consent form has been read and approved by the NSW Aboriginal Health and Medical Research Council. It includes all necessary information for parents or guardians to provide informed consent for their child to receive 4 applications of fluoride varnish by a dental assistant over 12 months at school. It has been clarified in line 199 that an Aboriginal Education Officer will be engaged by the school to explain the consent form to parents or guardians to seek informed consent and enroll the child into the study.

9. The CRA form needs attention. The image illustrating Sillness & Loe's method is not reproduce well, and there are some typos (e.g. 'fluoridate varnish'). Thank you the CRA has been amended (image has been clarified and typos corrected) and re-uploaded.