Reviewer’s report

Title: Dental Fluorosis In Populations From Chiang Mai, Thailand With Different Fluoride Exposures. Paper 2: The Ability of Fluorescence Imaging To Detect Differences in Fluorosis Prevalence and Severity for Different Fluoride Intakes From Water.

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Reviewer: Enosakhare Samuel Akpata

Reviewer’s report:


Comments
1. The authors attempt to diagnose changes in the prevalence and severity of dental fluorosis with different levels of fluoride intake from water, making use of quantitative laser fluorescence, QLF. To do this, they compare QLF assessment with remote photographic scoring of fluorosis, according to Thylstrup and Ferjeskov (TF) index. This indirect method compromises the validity of the study because it is not always easy to detect focal losses of surface enamel from photographs, and yet surface enamel loss has a significant effect on TF scoring of dental fluorosis. In spite of Fig. 2, I feel validity of the study would have been enhanced if QLF scores were compared directly with clinical diagnosis of the severity of dental fluorosis.

2. The authors did not assess sensitivity or specificity in the ability of fluorescence imaging to detect differences in the severity of dental fluorosis with varying fluoride exposures. The authors may still wish to do this from their database, as it would facilitate comparison with other diagnostic methods.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.