Reviewer’s report


Version: 1 Date: 29 September 2005

Reviewer: Kaisu Pienihäkkinen

Reviewer’s report:

General
The material the authors selected to demonstrate the shortcomings of a high-risk strategy has two serious shortcomings itself:

Firstly, the material is from a period of high caries level, from the United States in 1977-81. In this kind of population, the prevention must be given to all, and not even consider the high-risk strategy. The authors forget in their text that screening for caries and associated risk-based prevention programs has at least three commonly accepted prerequisites (e.g. See Hausen H: Caries prediction; in Fejerskov O and Kidd EAM (eds): Dental caries: the disease and its clinical management. Oxford, Blackwell, 2003, pp 327-341)

1. The prevalence of caries must be relatively low.
2. The identification of risk subjects must reach an acceptable level of accuracy.
3. There must be clinically effective measures available for prevention of the disease or healing the disease at its early stage.

The data from a high-caries level population cannot be used for the demonstration of the shortcomings of a strategy aimed at a low-caries level populations.

Secondly, the age group selected is one of the most difficult groups. The authors report the disease indices of past and future caries for permanent teeth only. However, at this age, the past and present caries lesions are mainly in deciduous teeth. Consequently, the restorative treatment at this age relates to deciduous teeth. Future caries affects deciduous and permanent teeth. Exfoliation of sound as well as decayed deciduous teeth occurs during the follow-up. The given indices do not draw the whole picture, but only a fraction of it.

The authors have previously written about the same topic: "The limitations of a high-risk approach for the prevention of dental caries. Community Dent Oral Epidemiol 2002;30:302-312." In relation to that publication, I agree with most of their opinions, especially in their long introduction. In relation to schoolchildren, I also share their opinion in the conclusion: "... from a public health perspective, policy for caries preventive strategies should be based on a "population" or "directed population" approach".

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Reject because too small an advance to publish

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests