Reviewer's report

Title: The vicious cycle of dental fear: exploring the interplay between oral health, service utilization and dental fear

Version: 1  Date: 7 December 2006

Reviewer: Sven Carlsson

Reviewer's report:

General

This study is based on a selected set of information from an Australian nationwide epidemiologic study or dental problems, dental health care behaviour and dental fear. The authors seem to have realized the possibility to approach the concept of a vicious circularity by focussing some of the results from this extensive epidemiologic endeavour. This is a notable feat. The idea of circular causality is a common one e.g. in the field of health psychology, but it has not often been the subject of empirical research.

The basic facts demonstrated in the study, e.g. the relationship between degree of fear and dental care behaviour, are far from sensational; what is new is the theoretical model into which the authors feed their data. This is in my opinion the main asset of this report, and an important one. The authors present a model of a vicious circle connecting dental fear, dental visiting, dental deterioration, and utility of dental care only when in acute need. The relationships postulated in the model should lead to specific consequences, e.g. delayed dental care in individuals with pronounced dental fear. All such effects are in the predicted direction, yielding support to the proposed model. It is of course difficult to picture a dynamic process like a vicious circle by analyzing the frozen picture in a cross-sectional study. The authors are aware of this problem and discuss it quite satisfactorily.

The epidemiologic investigation supplying data for the present study is very carefully designed, and the paper under review is excellently clear and well written. Despite its cross-sectional design, it represents an amazingly convincing empirical demonstration of possible links in a chain representing a more realistic etiological model than the traditional linear ones.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

None

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

None

Discretionary Revisions (which the author can choose to ignore)

1. One problem with the proposed theoretical model has to do with the supposed positive feedback between acute care and dental fear. Theoretically, it may be argued that an episode where the fearful individual is forced to seek help because of an acute dental problem, most probably connected with toothache, is an instance where he will be exposed to the feared situation. Such exposition is a potential means of decreasing the fear, not accentuating it as proposed by the model as it is presented in Figure 1. The authors may want to comment on this theoretical issue.

2. A four year period has elapsed since the survey furnishing the authors with the data that they so skilfully have used in constructing their model of circular causality. The reader may want to know if there are thoughts of a follow up study of a sub sample of the original material to confirm the causal links indicated in the present study.

3. Many proponents of vicious reciprocity between dental fear and its various consequences have stressed
the importance of successively escalating psychological influences: embarrassment, social stigmata, catastrophizing ideations, and other psychological changes have been thought to facilitate the progression in the vicious circle involving fear and dental decay. It is quite understandable that information on such factors can hardly be collected in an epidemiologic study with a telephone survey methodology. Some readers may want the authors to discuss the possible role played by such psychological factors in the further building of vicious circle models.

What next?: Accept after discretionary revisions
Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: No

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