

the ADA also carries out dental practice surveys to determine the costs of private dental practices and the productivity of dentists in the private and government sectors. For example, in 1997, self-employed general practitioners averaged about 58 patient appointments per week, which was equivalent to 2,550 patient appointments per year with about 2.1 visits each for the 1,200 different patients seen.<sup>4</sup>

Many groups in the community, such as the elderly, those living in institutions, the rural disadvantaged, socially disadvantaged, the disabled, Aboriginal and Torres Strait Islander people, refugees, and migrants, have special dental needs. To meet these needs, dental services must be expanded and be provided by a more appropriately trained dental health workforce in both the private and government sectors. The NSW Department of Health, universities, and TAFE colleges can provide such training,

which should include a focus on population health issues and the needs of special groups.

## REFERENCES

1. Barnard PD. *Facts and Figures in Australian Dentistry 1988*. Sydney: Australian Dental Association Inc, 1989.
2. Australian Dental Association (NSW Branch). *Dental manpower statistics as at July 1998*. Sydney: Dental Health Education and Research Committee, 1998.
3. Szuster FSP, Spencer AJ. *Dental practitioner statistics Australia, 1994*. Dental Statistics and Research Series, No. 11, AIHW, University of Adelaide, 1997.
4. Barnard PD, White J. Australian dental practice survey 1997. Third report. *Australian Dental Association News Bulletin* 1999; 266: 13-21.
5. Szuster FSP, Spencer AJ. *Dental hygienist labourforce Australia, 1996*. Dental Statistics and Research Series, No. 12, AIHW, University of Adelaide, 1997. ☒

## LETTERS TO THE EDITOR

### DEAR EDITOR,

I thank the reviewers for their comments on my article (Volume 10, Number 3), and the NSW Public Health Bulletin for the opportunity to reply to those comments.

In their review of the principal academic references that suggest a link between periodontal disease and preterm birth, Drs Roberts and Algert state '...the Offenbacher article provides only weak evidence, if any, of a causal association between periodontal disease and preterm birth...' and that '...what the study literally shows is a very strong association between PLBW and a variable the authors have created...'

Firstly, this study can only establish an association. Evidence for causation would come from a prospective controlled clinical trial. This would entail periodontal treatment of many women, since preterm delivery is a relatively rare and unpredictable event. However, it is appropriate to establish an association before embarking upon a periodontal intervention study.

The reviewers sought an explanation of the variable used. The yes/no variable that was created involves clinical attachment loss (CAL). The 'yes' category applies to women with CAL of +3mm affecting 60 per cent or more of their dentition. The authors observe, correctly, that mean measures of CAL are often insensitive. They then create a variable that limits the effect of insensitivity. The 'yes' level of CAL is likely to be a true positive observation of severe periodontal disease. A strong association is shown between severe periodontal disease in a particular population and preterm delivery. Investigations to define risk groups and establish causality would be helpful.

In their review of the principal academic references that suggest a link between cardiovascular disease (CVD) and oral health, Professor Tofler and Dr Kull reviewed papers reporting on the link between periodontal disease and CVD in larger populations. I agree with their comments that strong associations exist between periodontal disease and CVD and that further studies are warranted to investigate the effect of treatment interventions.

**Barbara Anne Taylor**

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### DEAR EDITOR,

Professor Tofler and Dr Kull rightly detail, in their comprehensive review of the putative association between periodontal and cardiovascular disease,<sup>1</sup> the potential confounders which compromise the epidemiological evidence demonstrating the link between periodontal disease and CVD, including the risk factors that operate in both diseases, such as age, cigarette smoking and diabetes; and social factors which may be active in both diseases. However, as they pointed out, such confounders were adjusted for and still statistically significant associations were found between the two diseases.<sup>2</sup> As they admitted, in theory, there are 'compelling biological links' between the pro-inflammatory effects of periodontal infection and the resultant CVD. However, randomised clinical trials would be close to impossible to construct, and the objective evidence linking the two diseases is most likely to come from strongly controlled epidemiological studies, as did

the evidence of fat intake and CVD, and intensive studies using appropriate animal models.

It is important that this association linking periodontal disease and CVD is not neglected until more substantive evidence of this association is sought. The association exists, although the biology is not yet understood, or indeed may be of questionable existence.

The association between periodontal disease and CVD is potentially extremely important and requires further exploration. Prospective epidemiological research needs to be undertaken to determine more clearly the type and strength of the association. Developing collaborative links between oral health and other health professionals would facilitate this research.


**Mark Shifter**

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**REFERENCES**

1. Tofler GH, Kull A. Cupid and the tooth fairy: The link between cardiovascular disease and oral health. *NSW Public Health Bulletin* 1999; 10; 47–48.
2. Beck J, Garcia R, Heiss G, Vokonoas PS, Offenbacher S. Periodontal disease and cardiovascular disease. *J Periodontal* 1996; 67; 1123–1137. 

**NOTICE OF CHANGES TO THE BULLETIN PRODUCTION SCHEDULE**

To streamline the release of the *Bulletin*, so that it is distributed as soon as possible after its title month, this August issue will not contain an Infectious Diseases Report.

Each *Bulletin* has to date presented the previous calendar month's infectious disease notifications, as reported by the Area Health Services. Constraints in collecting this information have affected the timeliness of each issue.

Consequently the *Bulletin* will in future contain an Infectious Diseases Report with notifiable conditions for two month's previous to the title month; for example, the September issue will contain notifiable conditions for July.

**NSW PUBLIC HEALTH BULLETIN**

The *NSW Public Health Bulletin* is a publication of the NSW Department of Health. The editor is Dr Lynne Madden, Manager, Public Health Training and Development Unit, NSW Health Department. Dr Michael Giffin is production manager.

The *Bulletin* aims to provide its readers with population health data and information to motivate effective public health action.

**Submission of articles**

Articles, news and comments should be 1000 words or less in length and include a summary of the key points to be made in the first paragraph. References should be set out in the Vancouver style, described in the *New England Journal of Medicine*, 1997; 336: 309–315. Send submitted articles on paper and in electronic form, either on disc (Word for Windows is preferred), or by email. The article must be accompanied by a letter signed by all authors. Full instructions for authors are available on request from the editor.

**Editorial correspondence**

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