

# Summary of: Oral health awareness in adult patients with diabetes: a questionnaire study

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## FULL PAPER DETAILS

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**Objective** To investigate oral health awareness, oral hygiene and attitudes towards general dental practitioners' (GDP) involvement in diabetes screening in adults with diabetes. **Design** Self-completion questionnaire. **Setting** General medical practices in Warwickshire. **Subjects and methods** Adults with diabetes attending clinics run by practice or diabetes nurses in general medical practices. **Results** Two hundred and twenty-nine of 615 (37.2%) questionnaires were completed in 14 general medical practices. The majority of respondents (79.8%, 178/223) visited a dentist once or twice a year, but oral care varied; 67.2% (133/198) reported brushing at least twice a day, whereas only 15.3% (29/190) flossed daily. Awareness of oral health risks was limited: 69.1% (150/217) had never received any oral health advice related to their diabetes. Over half of respondents supported the idea of dentists offering screening for diabetes (121/226, 53.5%). **Conclusions** Many adults with diabetes have poor awareness of oral care and health complications associated with diabetes, and are receiving limited advice from healthcare professionals. Training and advice for both healthcare professionals and patients concerning the importance of good oral health in patients with diabetes is needed. The role of dentists in diabetes screening and support requires further investigation.

## EDITOR'S SUMMARY

Will there come a day, I wonder, when we drop the epithet dental surgery in favour of dental medicine? Much seems to point towards that trend as the levels of caries fall leaving less need for surgical removal of hard tissue, as well as the emerging links between oral disease and general disease.

The confluence of diabetes and periodontal disease is one such strand which has emerged strongly in recent times. There is good evidence that people with type 2 diabetes are at greater risk for periodontal disease while studies also suggest that the effective treatment of periodontitis can have a favourable impact on glycaemic control. The interrelation of these two conditions points towards a logical joint approach to the prevention of them both and as dentists we are perhaps very well placed to initiate the awareness of this.

Sadly, from the results of this work, diabetic patients themselves are generally unaware either of the possible link

between the two conditions or that the effective prevention and treatment of periodontal disease could have such beneficial general health effects. That they are not being given oral health advice either through their general medical care system, or seemingly having it specifically reinforced at their dental visits means that a significant potential health gain is being missed through default.

As so often, education would seem to be a beneficial next step but this is needed for all participants: dental teams, medical teams and the luckless patients themselves. While its initiation in undergraduate medical and dental training would be ideal, reinforcement through postgraduate education is also vital. For patients, the obvious direct intervention of healthcare professionals is the most desirable approach. However, the use of magazine and health articles, radio and television programmes to raise awareness would also be of great potential value, just as knowledge about

plaque as a causative agent has been heightened by similar routes.

The full paper can be accessed from the *BDJ* website ([www.bdj.co.uk](http://www.bdj.co.uk)), under 'Research' in the table of contents for Volume 211 issue 6.

Stephen Hancocks  
Editor-in-Chief

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**IN BRIEF**

- Highlights the need for general dental practitioners to improve the awareness of the importance of oral healthcare advice in patients with diabetes.
- There is a need for education and training on the importance of oral healthcare for non-dental health professionals involved in diabetes care.
- There is a potential need for the inclusion of dental care in diabetes care pathways.

**COMMENTARY**

Dentists have long been aware that diabetes increases the risk for periodontitis, and recently there has been an increasing amount of evidence that treating periodontal disease in patients with diabetes can have a positive impact on glycaemic control. However, it is less clear whether patients with diabetes are aware of their increased risk for periodontitis and other oral diseases.

In this study, 229 patients with diabetes attending 14 general medical practices completed a questionnaire that asked questions about oral health behaviours and awareness. The results were disappointing. Whereas 80% of patients attended a dentist at least once per year, only 67% brushed their teeth twice daily, and only 15% flossed daily. Of major concern was the finding that over two-thirds (69%) had never received any oral health advice related to their diabetes. Approximately half of the respondents (53%) supported the idea of dentists offering screening for diabetes.

It is clear from this study that many patients with diabetes are not aware of their increased risk for oral diseases such as periodontitis, and only a minority have received oral health advice related to their diabetes. Training and advice for medical colleagues as well as patients would be very useful to improve knowledge of the risks for oral diseases associated with diabetes. Furthermore, given the high prevalence of undiagnosed diabetes in the UK, the dental team could be

ideally placed to screen patients for diabetes. Taken collectively, the data from this study suggest it is important to re-evaluate the role of the dental team in the management of people with diabetes, and dental clinicians could play a valuable role in the early detection of diabetes.

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**AUTHOR QUESTIONS AND ANSWERS****1. Why did you undertake this research?**

The expansion of the role of dental professionals to wider general health issues has been suggested in recent years and given the evidence of a relationship between diabetes and oral health, it would seem that dental professionals might play an important role in diabetes care, for example in screening for diabetes. However, information about the links between diabetes and oral disease is scarce in medical and patient literature, and there is little published research on the extent to which patients are aware of the links. Before exploring the role of dental and medical teams, we felt it was important to first establish whether adults with diabetes are aware of how diabetes could affect their oral health and their views on dentists' involvement in diabetes screening.

**2. What would you like to do next in this area to follow on from this work?**

Our findings suggest that people with diabetes lack awareness of the relationships between diabetes and oral health, and we suspect that this may be partly due to the limited knowledge of the health professionals involved in their diabetes care. Following on from this work we are keen to explore the educational needs of health professionals and those of patients (including young people with type 1 diabetes). We would also like to develop and evaluate oral health educational interventions for health professionals and patients in the primary medical care practice setting. Finally, we are keen to explore the potential and feasibility of delivering preventive health interventions in general dental practice.