CONFERENCE ABSTRACT

Diabetes and oral health (DiabOH): a developing model of integrated care
19th International Conference on Integrated Care, San Sebastian, 01-03 April 2019

Rachel Martin1, Phyllis Lau2, Hanny Calache1,3,4, Evelyn Boyce1, Mark Gussy4, John Furler1,2, Ivan Darby2, Matthew Chen2, Anthony Tran2

1: North Richmond Community Health, Melbourne, VIC, Australia; 2: Department of General Practice, The University of Melbourne, Melbourne, VIC, Australia; 3: Oral Health Economics Research Unit, Deakin University, Geelong VIC, Australia; 4: Department of Dentistry and Oral Health La Trobe University, Bendigo, VIC, Australia

Introduction: Interdisciplinary care is critical in diabetes management. There is evidence of a two-way relationship between diabetes and periodontal (gum) disease. Yet, medical and dental professionals continue to work in silos. This project aimed to develop and pilot an integrated diabetes oral health care model involving general practitioners (GPs), primary healthcare nurses (PHCNs) and oral health professionals (OHPs) in community health settings.

Methods: Mixed methods exploratory study was conducted. GPs, PHCNs and OHPs from four Australian community health centres with co-located medical and dental services participated in online surveys and some were selected for follow-up semi structured interviews to explore their perspectives on diabetes and periodontal care. An integrated care model comprising risk screening, assessment and referral processes was then developed based on the findings and advice from an advisory committee. Information and training on the model were provided before practitioners at one community health centre piloted the model for 2 weeks. Following the pilot, practitioners involved participated in focus groups and interviews to explore feasibility and acceptability of the model. All quantitative data was analysed descriptively, and qualitative data was analysed thematically.

Results: Fifty-eight practitioners completed the online surveys. Just over half were confident to identify risk factors or manage comorbid diabetes and periodontal conditions. Fewer than 2 in 10 always or often referred their patients with diabetes or periodontal conditions to each other. All except one agree that better interprofessional collaboration would benefit patients with diabetes.

Twenty-two practitioners participated in follow-up interview. Themes elicited were grouped under 4 domains: current practice, attitudes towards diabetes oral health management, subjective norms that influence attitudes, perceived behavioural controls that impact on integrated care.

During the pilot, 7 OHPs conducted 28 diabetes risk assessments, 7 GP/PHCNs conducted 59 periodontal risk assessments, resulting in 7 medical and 23 dental referrals. Eleven practitioners then participated in focus groups and interviews. Most found the model acceptable and feasible although there were concerns about patients’ receptiveness, time constraint, unintegrated information system, long dental appointment waiting list and lack of education in comorbid diabetes and periodontal disease.
Discussions: Interprofessional collaboration and education would improve diabetes and periodontal disease management. An integrated care model that addresses the beliefs and barriers that impact on health care professionals’ collaboration is needed. Findings from this study have informed the development of a multidisciplinary educational program for diabetes management and the refining of the integrated diabetes oral health care model.

Conclusion: The developed integrated diabetes oral health care model was acceptable and feasible in the Australian community health setting.

Lessons learned: Different funding models and priorities between clinical services, time constraint, costs and paperwork all influence the uptake of new knowledge and practices. Healthcare professionals need to understand each other’s roles and have opportunities to share information effectively.

Limitations: Small sample sizes; study conducted only in community health setting; pilot conducted only in one community health service.

Suggestions for future research: Future development of a cost-effective integrated care model would provide best practice care for patients with comorbid diabetes and periodontal conditions.

Keywords: oral health; diabetes; education; integrated primary care model; general medical practitioners