

Diabetes and Oral Health Research project. North Richmond Community Health (NRCH)

Dr Rachael Martin and colleagues won the best poster at the 2018 ADMA National Conference in Melbourne. The poster was titled Diabetes And Oral Health (Diaboh): Integrated General Medical And Dental Care. This profile discusses the study which was a pilot model of shared responsibility and involved health professionals (general practitioners, oral health professionals and practice nurses) from four community health services.

Organisation: North Richmond Community Health (NRCH)

Name and role: Dr Rachel Martin, Manager Oral Health program in collaboration with the rest of the Investigator/Research team: Prof Hanny Calache, North Richmond Community Health and Deakin Health Economics, Deakin University; Dr Phyllis Lau, Department of General Practice, University of Melbourne; Prof Mark Gussy, La Trobe University; Assoc. Prof John Furler, University of Melbourne & North Richmond Community Health; Prof Ivan Darby, Melbourne Dental School; Mr Anthony Tu Tran, Honours Student, Department of General Practice, University of Melbourne; Mr Matthew Chen, Honours Student, Department of General Practice, University of Melbourne; Ms Evelyn Boyce, CDE, Research Assistant, North Richmond Community Health

Name of project: Diabetes and oral health (DiabOH), an explorative research study on the feasibility of a shared care model of diabetes management

General overview of project and the main components of the project: Evidence shows that oral disease, in particular periodontal disease, is closely linked to diabetes and is considered a risk indicator for diabetes. The presence of periodontal disease in clients with diabetes complicates the diabetes management with a potential increase in diabetes episodes that may require hospitalisation. Early detection of diabetes risk in clients presenting with oral disease may delay or prevent the onset of diabetes. Similarly, early management of oral complications in patients with diabetes may delay the progress of the disease.

Currently oral health is not included in the general practice diabetes cycle of care; neither is diabetes screening included in oral health management of clients with periodontal disease. A shared care model of responsibility between general practice and oral health professionals will contribute significantly to improving the detection and management of diabetes.

The project is a mixed methods exploratory and explanatory study that used online surveys, interviews and focus groups with General Practitioners (GPs), Primary Health Care Nurses (PNs) and Oral Health Professionals (OHPs). The online surveys asked about managing diabetes and periodontal disease, and integrated care between medical and dental professionals at four Melbourne based community health centres with co-located general practice and dental services. Follow up qualitative semi-structured interviews were conducted with selected survey participants to further explore their responses. GPs, PNs and OHPs from North Richmond Community Health participated in a pilot, developed based on a literature review, survey and interview findings and advice from an advisory committee.

The research project piloted 1. The use of the validated Australian type 2 diabetes risk assessment tool (AUSDRISK) in oral health practice, and referral of clients identified at high risk to a GP for diabetes assessment and review. 2. The use of a periodontal risk assessment tool, which was developed as part of this project, in general practice by GPs and PNs, and a referral of clients identified at risk to an oral health service for periodontal assessment and review.

Focus groups were conducted with the participating GPs, PNs and OHPs to elicit feedback on the feasibility and acceptability of these tools in practice and referral processes.

Aims/objectives:

Aim: To develop a model of shared responsibility in diabetes management that involves GPs, PNs and OHPs in a community health setting.

Objectives:

- Establish an Advisory Group.
- Explore GPs/PNs perspectives on oral health management of patients with diabetes; and explore OHPs perspectives on diabetes management of their patients.
- Pilot an oral health screening tool for GPs/PNs at NRCH.
- Develop an education and training workshop for GPs/PNs/OHPs

Is your service a pilot or has it been mainstreamed?

The project has been piloted at this stage.

What is your patient demographic?

The patients involved in this study are economically, culturally and linguistically diverse. The majority are from low socioeconomic backgrounds.

How many staff are involved in delivering the service by discipline or health professional group?

We had 58 health professionals (GPs, PNs and OHPs) from four community health services complete the online surveys, with 22 of these participating in follow up interviews. Then 7 general medical practice staff and 7 oral health professionals from NRCH participated in the pilot study.

Do you measure outcomes? If so what outcomes are measured?

As this is an exploratory study, no outcomes were measured. The objective was to explore the perspectives of GPs, PNs and OHPs on diabetes and oral health management, inter-professional collaboration and their experience with the piloting of the shared care model.

What are the enablers for the delivery of a quality integrated care service?

Some of the enablers include:

- Support from all levels of management.
- Adequate education and experience for health practitioners, which increased understanding of the diabetes and oral health relationship and reduced the perceived barriers.
- Trialling the process prior to implementation to identify issues.
- Having clear protocols to refer to including visual templates made it easier
- Having referral templates embedded in software.

- Availability of referral pathways that are easy to access.

What would you suggest could help improve health system service delivery?

The health system service delivery could be improved by:

- A revised funding model for integrated health care that includes funding for oral health in the management of diabetes in general practice and funding for diabetes risk assessment in oral health practice.
- Oral health must be included as part of the diabetes cycle of care.
- More inter-collaboration and better referral pathways between general practice and oral health professionals.
- A multidisciplinary education model for the management of patients with diabetes and oral health issues.
- Improving consumer knowledge of the relationship between oral health and diabetes.

Other comments / potential new initiatives

Oral health issues, especially periodontal disease, are common in people with diabetes, and impact on glycaemic management.

There is a need to improve all health practitioners' knowledge of these issues. The ability to detect oral problems in patients with diabetes and diabetes risk in patients with oral disease through better understanding and appropriate management by medical, nursing and oral health practitioners will contribute to improving clients' quality of life.

Conducting ongoing research in this area in the public sector will contribute to achieving equity in access to excellent care and health outcomes for all Australians.