EXTERNAL ORGANISATION: Braemar Charitable Trust

SUPERVISOR/S: Ross Lawrenson (UoW), Kelly Reddington (WDHB), Francie Dibley (WDHB), David MacCormack (Waikato Hospital) and Katie Ayers (Dental Public Health)

PROJECT TITLE: What are the barriers to improving the dental care with patients with rheumatic heart disease?

PROJECT LOCATION: Waikato Hospital, Hamilton

PROJECT AIM: The aim of this study is 1) to establish the current dental status of patients with rheumatic fever/valvular heart disease and to find out what dental care they have received in the last 2 years 2) to understand the range of treatment and costs 3) to find out what barriers patients have had to accessing dental care.

PROJECT ABSTRACT: Rheumatic fever is still prevalent in New Zealand with elevated rates of initial acute rheumatic fever (ARF) greater in Māori (aRR 11.8) and Pacific Islander (aRR 23.6) compared with persons of European/other ethnicity. There are also higher rates of initial RHD hospitalization for Māori (aRR 3.2) and Pacific Islander (aRR 4.6) and RHD deaths in Māori (aRR 12.3) and Pacific Islanders (aRR 11.2) (Bennett), Rates also were higher in socioeconomically disadvantaged neighborhoods. To curb high rates of ARF and RHD, New Zealand must address increasing social and ethnic inequalities. (Baker M) Cases that have been identified are offered regular prophylactic bicillin injections to prevent further damage. Many of the patients receiving prophylaxis have established valvular damage. These patients are at risk of bacterial endocarditis. One of the major risk factors for bacterial endocarditis is poor oral hygiene or having dental treatment. (Cannon J) There is a concern that inadequate attention is paid to the maintenance of good oral health in many patients with rheumatic heart disease. (Maharaj M) The Waikato DHB have provided funding for the dental assessment of patients with established rheumatic fever since 2018. There are approximately 180 active cases on rheumatic fever register of whom >80% are Māori. Half of these patients are over 18 years and eligible for DHB funding of their dental care. A second group of patients for whom funding is available are those with established valvular heart disease requiring surgery. While in some centers poor oral health is not a reason for delaying surgery in the Waikato DHB generally patients requiring dental treatment will have this before they have their surgery.

STUDENT SKILLS:
- The student should be confident in using Maori tikanga when approaching patients and have an understanding or oral health.
- Student must have an interest in health research

PROJECT TASKS:
- The student will collate the data for both groups of patients
- They will contact patients either through the RhF CNS or Cardio-thoracic CNS to ascertain whether they would be open to be interviewed about their dental care.

EXPECTED OUTCOMES:
- Student’s Research Poster (as per clause 6 of the Scholarship regulations)
- This paper should lead to a publication on the barriers to oral health for high needs patients with RhF or valvular heart disease.
- Students are expected to present at the Waikato Clinical Campus Research Forum
- Peer reviewed paper