

2015/2016 Summer Studentship Project Application Form

Send to: Research Office, University of Otago Christchurch, PO Box 4345, Christchurch, by 5pm on **3 July 2015**

Supervisor Information (First named supervisor will be the contact):

Supervisor's Name and Title(s): Dr Peter Fowler, Dr Joseph Antoun, Dr Lyndie Foster-Page, Grace Nichols, Prof Mauro Farella

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Research Category (Choose one category only – to be used for judging the students' presentations):

Clinical X

Laboratory

Community

Project Title (20 words MAXIMUM):

Oral Health-related Quality of Life changes in orthodontic patients at Christchurch Hospital

Project Description:

Introduction:

Orthodontists work collaboratively with other medical specialties in order to improve the quality of life for patients with cleft palate and severe malocclusions. The burden of disease for these patients who require orthodontic treatment is socially and functionally debilitating. Severe untreated malocclusions can impact on many aspects of a patient's health through social stigmatisation and psychological impacts. The patients seen at Christchurch Hospital's Orthodontic Clinic usually have severe malocclusions and suffer from financial hardship or have craniofacial anomalies such as cleft lip and/or palate. Orthodontic treatment undertaken by these patients represents a significant commitment from the patient with treatment extended over several years and is carried out within limited DHB funding. It is important that clinicians have a holistic-view on the impact that their treatment has on a patients' self-perceived quality of life and that improvements can be measured and quantified.

In recent years, there has been a shift in the methods used to measure patient outcomes from clinical based indices to a more patient-centered approach. The latter includes the use of patient perception questionnaires. These questionnaires can be evaluated over time to better understand changes in the individual's self- self-perceived psychological well-being and quality of life following treatment. The relationship between malocclusion and quality of life is not straight forward; however other factors (such as ethnic background, dental health status and demographics) may also play a role in moderating this relationship. There is, therefore, a large scope for unique research into this area.

Aim: To investigate the impact of orthodontic treatment on oral health-related quality of life in a cohort of publically funded patients treated by the CDHB.

Method:

Inclusion criteria:

1. Consecutively-treated, consenting patients with severe malocclusions (DAI score greater than 36) and patients with cleft lip and/or palate.

Exclusion criteria:

1. Patients with genetic syndromes.

The student's exposure to scientific method will include:

1. Review of the literature on the current knowledge regarding quality of life, malocclusions and orthodontic treatment.
2. Entering socio-demographic data and the before and after quality of life questionnaire data into a spreadsheet (existing data has already been collected for approx. 80 patients)
3. Calculate of the social deprivation score for each patient using the area-based measure, NZDep13.
4. Determining the severity of a malocclusion using a clinical based index (DAI Index)
5. Determining the improvement in occlusion following orthodontic treatment using a clinical based index (PAR Index)
6. Statistical analysis (with the assistance of a statistician using SPSS software).

Student Prerequisites (eg. Medical Student) if applicable:

None.