



Bachelor of Oral Health

3rd year Research Presentations

Thursday 24 October 2019

Jean Falkner Tahija Lecture Theatre

9.00am Opening of Research Presentations: Professor Michael Morgan

BOH HONOURS RESEARCH

9.10am Exploring allied health and nursing professionals' practice in assessing and managing patients' oral health care following a stroke
Erich Seng

BOH ORAL HEALTH THERAPY RESEARCH

9.30am Exploring a model of oral health care for juveniles in detention
Jonathan Vu

9.45am The role of the Oral Health Therapist in preventing osteoradionecrosis
Benjamin Lim

10.00am The provision of oral health care for patients undergoing haematopoietic stem cell transplant.
Masuma Abbasi

10.15am The utilisation of Oral Health Therapists in preventing the need for General Anaesthesia for patients with Intellectual Disability
Hira Shah

MORNING TEA BREAK 10:30 – 11:00 am

11.05am The creation of oral hygiene resources for Melbourne Dental Clinic (MDC) orthodontic patients
Niccolo Calma; Mark Suniga; Vicky Wang & Tina Vuong

11.30am Investigating the barriers to oral health for the Australian homeless population
Jordan Huynh

11.45am Exploring the barriers in achieving optimal oral health for people with mental illness who live in Supported Residential Services
Janette Lim

12.00pm The relationship between stress levels and perceptions of the environment of BOH students at the University of Melbourne Dental School
Olena Korol, Rachel Saleem, Batrisyia Selamat, Sze Ying Yap

12.30pm – 1:30 pm LUNCH BREAK

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- 1.30pm **The Sustainable Development Goals: A multi-disciplinary approach to health promotion in Nepal** Isabella Hanlon
- 1.45pm **Social determinants of Early Childhood Caries in rural children** Junwai Liu
- 2.00pm **Oral Health of Refugees residing in Rural communities.** Chrysi Kroone
- 2.10pm **Oral Health Education at Emerson Special Needs School**
Lucy Tang; Emily Te; Ju-Sun Yoon
- AFTERNOON TEA BREAK 2.30pm – 2.55pm**
- 3.00pm **Understanding the barriers to achieving oral health for Aboriginal adolescents in Robinvale** Yongxin Liu
- 3.15pm **Exploring the links between Chronic Kidney Disease (CKD) and oral health in Aboriginal communities in East Arnhem Land (EAL).** Andrea De Lima
- 3.25pm **Considering the use of Silver Diamine Fluoride in remote Aboriginal communities in East Arnhem Land** Alexandra Pantellis
- 3.35pm **Exploring prenatal and early childhood oral health promotion for Aboriginal (Yolgnu) communities in North East Arnhem Land, Australia.** Keera Buswell
- 4.00pm **Use of Social Media for Oral Health Promotion in Rural and Remote Aboriginal Communities** Elle Theodorakopoulos

4.15pm to 4.30pm Closing Remarks Professor Julie Satur

With thanks to our Host Organisations

The Royal Flying Doctor Service, Peter Mc Callum Cancer Centre, Miwatj Health Aboriginal Corporation, Co-Health, Dental Health Services Victoria, U21 Global Health Partnership and North Richmond Community Health ——— and our Sponsors.....



The Dental Hygienists' Association of Australia Inc. VIC Branch





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Bachelor of Oral Health with Honours Presentation

Exploring allied health and nursing professionals' practice in assessing and managing patients' oral health care following a stroke

Presenter: Enrich Seng

Supervisors: Dr Roisin McGrath & Dr Marlena Klaic

Background:

The assessment and management of oral health following a stroke is important; however, literature suggests that oral health is poorly addressed in stroke survivors. There is a need to understand Australian allied health and nursing professionals' (AHNPs) knowledge, attitudes and behaviours in relation to the assessment and management of oral health care with stroke populations.

Aim and Objectives:

This study explored AHNPs practices in assessing and managing stroke survivors' oral health. The objectives were to understand AHNPs oral care practices and their perspectives on oral health.

Method:

This mixed methods exploratory study involved qualitative focus group interviews and quantitative medical records audit. Two focus group interviews, guided by the Theory of Planned Behaviour, were conducted with AHNPs from the Royal Melbourne Hospital. Focus groups were audio-recorded, transcribed, deidentified and thematically analysed using NVivo software. Sixty medical records were randomly selected, de-identified and audited using excel. Ethics approval was granted by Melbourne Health and the Melbourne Dental School (ID 1954597).

Results:

The medical records audit revealed oral health was addressed in less than half of stroke patients. More patients in acute care received oral health assessments and management compared to those in sub-acute care. Major themes identified from focus group data included: importance of oral health to general health; responsibility for stroke patients' oral care; and barriers and enablers to performing oral care with stroke patients.

Conclusion:

The findings from this study suggest AHNPs have positive attitudes to oral health care. However, the lack of clarity about roles and responsibilities and AHNPs lack of oral health training are barriers to optimal care. There is a need to develop evidence-based policy, guidelines and protocols for oral health care after stroke.



Bachelor of Oral Health 3rd year Research Presentations

Exploring a model of oral health care for young people in detention

Presenter : Jonathan Vu Quoc Anh

Supervisor: Dr Roisin McGrath

Background:

The number of incarcerated youths in Victoria is growing. The incarceration period provides an opportunity to correct any health disparities experienced by this population. However, as the number of inmates grows so does the resources required to deliver oral health services to address the complex oral health needs of youths' in detention. It is important to review the provision of oral health care in this setting as it can assist in determining measures to ensure consistency of care.

Aims and Objectives:

To understand the oral health needs of juveniles in detention and the current model of oral health care for incarcerated youths at Parkville Youth Justice Precinct (PYJP).

Method:

A narrative literature review was conducted to identify the oral health needs of inmates in Australia and internationally. Observations in the onsite dental clinic were completed at PYJP over four sessions. Informal discussions with inmates, Dental Health Services Victoria and PYJP staff were conducted. Case studies were developed to help understand barriers to the provision of oral health care in the correctional facility, and to explore potential improvements that can be made to current model of oral health services in juvenile detention.

Results:

Youth justice inmates have high levels of untreated dental decay. The consistency of oral health care at PYJP is limited by available resources. Coordination of oral health care after detention is not well supported.

Conclusion:

Incarcerated young people require integrated care to address their complex oral health needs. Coordination of oral health care after detention should be considered to ensure continuity of support.



Bachelor of Oral Health 3rd year Research Presentation

The role of the Oral Health Therapist in preventing osteoradionecrosis

Presenter: Benjamin Lim

Supervisor: Dr Clare McNally & Ms Marg Randles-Guzzardi

Background:

Osteoradionecrosis (ORN) is a rare but debilitating side effect of radiation therapy for head and neck cancer patients. This condition most commonly occurs in patients who require dental extractions post radiotherapy. Improving oral health prior to the cancer treatment is a key component of prevention. There is limited research on the role of the Oral Health Therapist (OHT) in dental oncology.

Aim and Objectives:

The primary aim of this project was to investigate the role of an oral health therapist in preventing and managing osteoradionecrosis.

Method:

The first stage of the project was to conduct a detailed literature review to determine the risk factors for developing osteoradionecrosis. The second stage of the project was a four-week clinical placement at Peter MacCallum Cancer Centre (PMCC) dental oncology unit. During this placement I worked alongside the PMCC team to gain an understanding of the role of the OHT in preventing ORN. The final component of the project was to use the information and knowledge gained from the placement to develop a patient resource on oral health and ORN.

Results:

The literature review found that preventing extractions post-radiotherapy significantly reduced the risk of osteoradionecrosis. Examinations, product recommendations and oral hygiene instructions are delivered by the OHT at PMCC to reduce the need for invasive dental procedures following radiation to the head and neck.

A final draft of the patient resource was submitted to the PMCC branding committee and is currently under review.

Conclusion:

It is recommended that patients who have undergone radiotherapy reduce their risk of dental disease related extractions by maintaining good oral hygiene and having regular dental check-ups. An oral health therapist plays a preventative role in the management of osteoradionecrosis.



Bachelor of Oral Health 3rd year Research Presentation

The provision of oral health care for patients undergoing haematopoietic stem cell transplant.

Presenter: Masuma Abbasi

Supervisors: Dr. Clare McNally & Ms Shae Beaton

Background:

Poor oral health and a lack of oral care during haematopoietic stem cell transplant (HSCT) can increase the risk of developing debilitating oral side-effects. The pain and dysfunction associated with these conditions can reduce quality of life, self-esteem and impact on talking and eating.

Aims and Objectives:

The primary aim of this project was to develop an understanding of what oral hygiene practices are recommended for patients undergoing HSCT in Australia. The secondary aim was to explore the role of an oral health therapist (OHT) in oncology.

Method:

A literature review was conducted, and a four-week placement was undertaken at the Peter MacCallum Cancer Centre (PMCC). The placement involved working as part of the dental oncology team, conducting evaluative discussions with patients and developing an understanding of the multi-disciplinary team (MDT) approach to HSCT management. An oral health resource was developed for HSCT patients by the end of the placement and submitted to the PMCC branding committee for review.

Results:

There are no clinical standards or guidelines for the provision of oral hygiene practices during HSCT. Literature and evaluative patient discussions indicated that patients who had good oral health prior to HSCT and continued oral hygiene practices were less likely to develop oral side-effects. Case studies on MDT approach to patient care emphasized that there is a greater role for the OHT beyond working in general dental settings.

Conclusion:

Professional dental care and oral hygiene regimen at home is essential throughout HSCT and can make a significant difference in alleviating the impact of the side-effects experienced by the patients. Future research should focus on developing an oral hygiene practice standard.



Bachelor of Oral Health 3rd year Research Presentation

The utilisation of Oral Health Therapists in preventing the need for General Anaesthesia for patients with Intellectual Disability

Presenter: Hira Shah

Supervisor: Dr Clare McNally

Background:

There is limited research investigating the role of Oral Health Therapists (OHTs) in the peri-operative management of patients with Intellectual Disability (ID) undergoing dental treatment under General Anaesthesia (GA).

Aim and Objectives:

The primary aim of this project was to identify the reason people with ID require GA for dental treatment. The secondary aim was to describe the role of the OHT in the intra-disciplinary team that supports people living with ID.

Method:

The first stage of this project involved conducting a literature review to evaluate how dental patients with ID are currently assessed peri-operatively. The second stage involved placement in the Special Needs Dentistry department at the Royal Dental Hospital of Melbourne (RDHM) which encompassed clinical observations and discussions with practitioners, patients and carers.

Results:

Patients with ID who attend post-GA appointments are less likely to require invasive treatments and repeat GAs than those who do not attend for regular dental maintenance. Discussions with clinicians revealed that dental treatment under GA is avoided wherever possible and the main reasons for referral to GA is when patients are unwilling or unable to undergo dental treatment in the traditional clinical setting safely. At the RDHM, a pre-operative assessment of patients is required prior to referral to GA, however post-operative appointments are rare.

Conclusion:

Oral Health Therapists have been identified as having the necessary skillset to manage patients with ID but are currently underutilised in this sector. Further research is required to explore the effectiveness of OHTs in preventing the need for GA for patients with ID.



Bachelor of Oral Health 3rd year Research Presentation

The creation of Oral Hygiene instruction resources for Melbourne Dental Clinic (MDC) orthodontic patients

Presenters: Niccolo Calma; Mark Suniga; Vicky Wang & Tina Vuong

Supervisors: Professor Julie Satur; Ms Caroline Koedyk & Assoc. Professor Paul Schneider

Background:

Patients undergoing orthodontic treatment are at an increased risk of oral conditions such as gingivitis, enamel demineralization and caries. Practitioners have acknowledged that there is a need to provide oral health resources to reinforce and support the advice given during clinical appointments. This project has used patient and practitioner consultations to develop and refine evidence based, relevant, acceptable and effective oral health resources for use by staff at Melbourne Dental Clinic.

Aims and Objectives:

To design oral hygiene education resources that MDC and their patients will find effective and comprehensive, to implement these resources with MDC orthodontic patients and to evaluate the effectiveness of these resources.

Method:

Using evidence from a systematic review undertaken in 2018 and performing a needs assessment, the contents and medium of the resource was determined. A draft video and brochure were created and refined with the help of supervisors and postgraduate orthodontic students. After final refined copies were made, they were shown to 20 patients at MDC during clinical consultations. The effectiveness of the resources was evaluated through personal communication and discussion after their presentation.

Results:

An eight-minute video was produced and brochures to take home were the chosen formats to support the oral health needs of patients. The following topics were covered: the contents of the care package, food, toothbrushing, interdental cleaning, tooth mousse/fluoride mouth rinse, mouth guard, dental wax, music tape and teeth grinding. Feedback during personal communication with practitioners and patients was overall very positive.

Conclusion:

Patient and practitioner consultations were used to develop and refine an evidence based, effective oral health resources for use by staff at MDC. A video was produced for use during an initial orthodontic appointment and for later reference on the MDC website. A brochure supporting the material was designed for patients to take home. The oral hygiene education resources were considered to be both effective and comprehensive. Further research will be required to evaluate their effectiveness in improving oral hygiene among patients and preventing oral disease.



Bachelor of Oral Health 3rd year Research Presentations

Investigating the barriers to oral health for the Australian homeless population

Presenter: Jordan Huynh

Supervisors: Dr Andrew Neil & Ms Elizabeth Cobbledick

Background:

A number of studies report that the homeless population have poorer health and oral health than the general population.

Aim and Objectives:

The aim was to investigate the barriers that the Australian homeless population face regarding oral health care, and the areas to improve oral care for this target population.

Method:

A literature review followed by Placements at six different Supported Residential Services (SRS) in metropolitan Melbourne were completed. Dental screenings were conducted for a number of residents. Discussions with five individuals were developed as case studies for this research project. One of the individuals had experienced homelessness in the past, two were currently living in SRS and two are living in insecure housing.

Results:

The majority of residents living in SRS were tobacco smokers and many had poor eating habits. Intra-oral examinations revealed they all had poor oral hygiene. Transport was also found to be a significant barrier which hindered attendance rates. The SRS residents were more likely to attend dental appointments for management of pain, rather than as part of a general care plan. Other participants in insecure housing stated they were able to attend appointments as long as they were not busy. It was also found that SRS staff provided limited support to residents to maintain good oral health.

Conclusion:

A number of factors were identified which may explain the poor oral health of people who are homeless or who live in insecure housing. This includes poor oral hygiene, a lack of support from SRS/housing staff, high smoking rates and poor diet. Transport was a factor which contributed to poor dental attendance. Some of these findings could be addressed through provision of training for SRS staff in how to support residents' oral health needs, and the establishment of transport support schemes. Support for regular dental appointments as part of a general care plan and not just intermittently for management of pain is also required.



Bachelor of Oral Health 3rd year Research Presentation

Exploring the barriers in achieving optimal oral health for people with mental illness who live in supported residential services

Presenter: Janette Lim

Supervisors: Dr Andrew Neil & Ms Elizabeth Cobbledick

Background:

A number of studies report that residents living in pension level Supported Residential Services (SRS) suffer from mental illness, have poorer oral health compared to the general population and experience a number of barriers in accessing oral health services.

Aims and Objectives:

The supported residential service elective placement was to gain an understanding of oral health issues, and the barriers to care, experienced by residents.

Method:

A literature review was carried out prior to undertaking placements at different pension level SRS's around Melbourne metropolitan suburbs. Dental screenings, referral pathways to community clinics and oral health education and instructions were provided to residents. Discussions and observations with staff and residents were used to inform understanding.

Results:

Six different SRS were visited, 48 residents were screened and four residents were selected as case studies. From this elective placement, knowledge about the barriers in achieving optimal oral health for people who suffer from mental illness living in supported residential supported services were explored and the skills to provide dental care as an oral health therapist to those living in SRS's were developed.

Conclusion:

Pension level SRS residents experience a number of barriers in maintaining good oral health including reduced health support from SRS staff, transport issues which reduce health service accessibility, the impact of their mental illness upon self-care, high tobacco use, disabilities, poor diet and polypharmacy. Clinical experience and skills were also developed to provide care as an oral health therapist to SRS residents.



Bachelor of Oral Health 3rd year Research Presentation

The relationship between stress levels and perceptions of the environment of BOH students at the Melbourne Dental School

Presenters: Olena Korol; Rachel Saleem; Batrisyia Selamat; Sze Ying Yap

Supervisors: Professor Julie Satur; Mrs Nicole Stormon & Ms Caroline Koedyk

Background:

Studies consistently show that academic requirements present a major cause of stress and anxiety for students enrolled in undergraduate dental programs. It is appreciated that levels of stress will vary among students depending on their perception of a situation and the ability to cope with difficulties. However, there is limited research documenting the link between the personality and well-being of dental students in Australia, let alone specifically Bachelor of Oral Health (BOH) students.

Aim and Objectives:

This study aimed to investigate the relationship between BOH students' stress and perceptions of their learning environment at the Melbourne Dental School.

Method:

Students enrolled in years 1-3 of the Bachelor of Oral Health programme at The University of Melbourne were invited to complete an online survey. The survey included demographics, the Dundee Ready Education Environment Measure (DREEM) and the Depression, Anxiety and Stress Scale (DASS-21). The data were analysed using the statistical analysis program JASP. Basic descriptive analysis and appropriate tests such as Chi-square and Pearson's correlation coefficient were undertaken for significant correlations within the data.

Results:

Overall, 75 (80% of whom were female) students participated in the survey, resulting in a response rate of 59.5% among all year levels. Participants were generally positive about their learning environment, with a total DREEM score of 130 out of 200. The mean DASS-21 score for this cohort was in the normal range for stress (7.1, SD 4.1), with 23.3% of students having moderate or above levels of stress. There was moderate inverse correlation [$r=-0.44$, $n=75$, $p<0.001$] between students' perceptions of the learning environment and their stress levels.

Conclusion:

The information from this study may help in designing curriculum, related support and counselling that enhances the student experience and academic outcomes. It may also assist in generating new knowledge on how educators can help improve and enhance students' learning experiences.



Bachelor of Oral Health 3rd year Research Presentation

The Sustainable Development Goals: A multi-disciplinary approach to health promotion in Nepal

Presenter: Isabella Hanlon

Supervisor: Ms Brenda Ryan

Background:

The Global Learning Partnership (GLP) is a program encompassing students from various universities involved in the Universitas 21 (U21) network. Both the U21 and GLP are underpinned by use of the United Nation's Sustainable Development Goals (SDG) to lead change and support action for achieving SDG targets. Four health disciplines; Nursing, Physiotherapy, Medicine and Dentistry came together to form three health promotion intervention groups for women's health, chronic disease and disability and oral health in Bethanchowk in rural Nepal..

Aim and Objectives:

The GLP oral health group intended to enable the community to increase self-efficacy and health literacy by facilitating an increase in knowledge, introduction of new skills and influencing positive changes in attitudes and behaviours towards oral health across all ages.

Method:

Interventions were carried out across four main population groups who were identified as key stakeholders in the program; Field Community Health Volunteers, schools, health care workers and the general community. Tailored education sessions covered a variety of topics such as brushing technique, relevant links between general and oral health and the prevention, management and treatment of common dental diseases such as caries and periodontitis.

Results:

Feedback, evaluations and open discussions acquired from all of the key stakeholders have allowed for impact evaluation of the program. Throughout the interventions the GLP was able to build capacity amongst all of key stakeholders and intervention groups. A direct result from the program was the success in advocating for a local arrangement to dental services within Bethanchowk.

Conclusion:

All information collected through the GLP has been the foundation for recommendations such as the facilitating the reorientation of health services and partnerships to improve access to continue oral health advocacy within the community. The outcomes and findings will also help to inform future interventions, research areas within Bethanchowk and other rural regions of Nepal.



Bachelor of Oral Health 3rd year Research Presentation

Social determinants of Early Childhood Caries in rural children

Presenter: Junwai Liu

Supervisors: Dr Roisin McGrath; Ms Joy Laroya & Ms Kate Storr

Background:

Oral health is important for overall health. Dental caries is one of the most common health issues affecting Australian children. Complex social factors contribute to the higher prevalence of Early Childhood Caries (ECC) in rural children compared to those in metropolitan areas.

Aims and Objectives:

The aims during this elective aimed to explore the social determinants of ECC which contribute to the poor oral health in rural children and to investigate the role of oral health therapists (OHTs) in delivering oral health education in rural settings.

Method:

A narrative literature review was undertaken to understand oral health issues in rural children. In partnership with the Royal Flying Doctor Service Victoria (RFDSV), BOH students provided free dental screenings to school children and oral health education (OHE) in rural kindergartens and preschools. These outreach visits were used to explore rural children's oral health knowledge and behaviours.

Results:

Social determinants of oral health identified in the literature included poor access to dental services, lack of fluoridated drinking water, lack of rural dental practitioners, low socioeconomic status and poor oral health literacy of parents. These factors contributed to an increased caries risk in rural children. Over four trips, a total number of 13 schools were visited and 324 students were screened. OHE was delivered in four preschools. It was found that most rural children have never seen a dental practitioner, which may be associated with parents' behaviours and lack of awareness about oral health.

Conclusion:

Addressing the social determinants of ECC is still a 'work in progress'. There should be a greater focus on prevention of ECC through outreach programs such as involving OHTs providing regular checkups and conducting oral health education sessions with teachers and parents. This can assist in tackling ECC among rural children.



Bachelor of Oral Health 3rd year Research Presentation

Oral Health of Refugees residing in Rural communities

Presenter: Chrysi Kroone

Supervisor: Dr Roisin McGrath; Ms Joy Laroya & Ms Kate Storr

Background:

Oral health disparities exist between rural and urban populations. Those living in rural areas have higher rates of DMFT, untreated tooth decay and higher rates of periodontal disease. Similarly people from refugee backgrounds experience a higher burden of oral disease. Refugees residing in rural areas face compounded barriers to achieving optimal oral health. Investigating and addressing the oral health of refugees in rural areas should be a priority, yet there is limited research on the oral health of this population group.

Aims and Objectives:

The aims of this project were to investigate barriers to oral health experienced by refugees residing in rural areas and to identify possible interventions to address these barriers.

Method:

A narrative literature review was conducted to explore what is currently known of the oral health of rural refugees. In addition, four one-week elective placements to rural Victorian towns were undertaken with the Royal Flying Doctor Service (RFDS) of Victoria. These trips involved oral health screenings of children in day care centres and primary/secondary schools.

Results:

Three main barriers to rural refugees accessing oral health care were identified in the literature review: cost of dental services, language barriers and competing priorities. During the placement three hundred and ten children were screened over seven towns. A significant number of these children had never visited a dental practitioner or were irregular attenders.

Conclusion:

The results indicate that people residing in rural areas have difficulty in accessing oral health services. Even though none of the children screened were from refugee backgrounds it can be assumed that access to oral health care will be even more difficult for this population group. Potential solutions to these barriers include, culturally aware dental workforce and re-orientation of health services



Bachelor of Oral Health 3rd year Research Presentation

Oral Health Education at Emerson Special Needs School

Presenters: Lucy Tang; Emily Te & Ju-Sun Yoon

Supervisors : Ms Julie Owen & Professor Julie Satur

Background:

Children with special needs are more likely to have unmet dental needs. Reported barriers leading to compromised oral health may include being less dextrous, medication side effects, lack of caretaker motivation, access and economic aspects. One of the potential settings to introduce oral health are schools, where the early introduction and reinforcement of good oral health behaviours may assist children in developing beneficial habits for life.

Aims and Objectives:

The project aimed to develop and present an oral health education promotion program suitable for children at Emerson Specialist School. The objective of this study was to design and deliver oral health education which caters to those with mild intellectual processing difficulties using teaching methods and communication styles that would suit children with special needs.

Method:

The topics presented to the 12 classes at the Emerson Middle School were the importance of dental hygiene and low-sugar diet. Teaching was then evaluated by the Emerson teachers. The qualitative data, in the form of Likert scales and short answer questions, were then analysed for the overall effectiveness of the implementation. Sustainability of this project was encouraged by leaving the resources the BOH students created for the teaching of oral health.

Results:

The BOH students led oral hygiene sessions were critiqued by the Emerson teachers to be positive and effective. The use of visuals such as a large teeth model, sugar packs and the board game were beneficial in terms of drawing the children's attention and engagement. Speaking in a clear, slow-paced and slightly louder voice using simple terms was also evaluated to be crucial when teaching children with special needs.

Conclusion:

Specific tailoring and communication of oral health education messages to suit the identifiable comprehension needs of children with mild intellectual processing difficulties is most effective. Use of different types of interesting visual aids is recommended for future studies



Bachelor of Oral Health 3rd year Research Presentation

Understanding of social determinants and barriers to achieving oral health for Aboriginal adolescents in Robinvale

Presenter: Yongxin Liu

Supervisors: Professor Julie Satur & Ms Caroline Koedyk

Background:

Poor oral health outcomes of Aboriginal Australians are well documented. There has been a significant amount of research conducted with Aboriginal children and pregnant women, but understanding the factors influencing oral health for the young Indigenous teenagers is not well addressed in the literature.

Aim and Objective:

This study aims to achieve an understanding of the social determinants and barriers to achieving oral health for Aboriginal adolescents, in conjunction with developing skills to provide services for Indigenous teenagers in remote Aboriginal communities.

Method:

A literature review was performed prior to a four-week trip to Robinvale (Victoria) with the dental team from North Richmond Community Health. Dental screening, treatment and oral health activities were implemented for the local Aboriginal community. Meanwhile, the author also attended to a six-hour Aboriginal cultural training session and joined an Aboriginal Elders luncheon in Robinvale to develop an improved understanding of local Aboriginal culture. Discussions were conducted with the local Aboriginal teenagers, parents, health workers and Elders, along with health service and program managers.

Results:

Suboptimal oral health outcomes of Aboriginal adolescents at Robinvale are not only associated with the poor oral health literacy and high sugar intake but also the social determinants. These include intergenerational trauma, systemic racism, lack of funding, limited access to care, unemployment, low socioeconomic status, psychological distress, tobacco smoking and alcohol consumption.

Conclusion:

Undertaking cultural awareness preparation and respect for culture are crucial in developing sound approaches to oral health care for an Aboriginal community. Oral health practitioners providing care for Indigenous adolescents need to adopt a holistic approach to care by understanding the local social, psychological and economic challenges for this population.



Bachelor of Oral Health 3rd year Research Presentation

Exploring the links between Chronic Kidney Disease (CKD) and oral health in Aboriginal communities in East Arnhem Land (EAL).

Presenter: Andrea De Lima

Supervisor: Professor Julie Satur & Ms Juliette Mundy

Background:

High rates of oral diseases and CKD significantly affect Aboriginal (Yolgnu) people throughout EAL. Those affected by CKD, receiving peritoneal dialysis, haemodialysis treatment, or awaiting transplant have an increased risk of developing a variety of oral manifestations. However, these oral conditions are difficult to treat due to economic issues, workforce maldistribution, access to care and separated services.

Aim and Objectives:

To investigate the links between CKD and oral health in Yolgnu communities of EAL. To examine the current evidence and implications for remote communities regarding CKD and oral health; explore existing renal programs implemented across EAL and to identify opportunities for enhanced management and prevention of oral health complications in Miwatj programs.

Method:

Investigations via a needs assessment were undertaken to highlight the opportunities for primary health care workers, to support the oral health of those living with CKD. Discussions and observations were conducted with a renal health coordinator from Miwatj Health Aboriginal Corporation. Oral health education sessions were delivered under the supervision of an Oral Health Therapist employed by Miwatj.

Results:

There is a need for dental services to manage those nearing stages 3 to 5 of CKD and prior to dialysis or kidney transplant. There is limited access to regular dental services across the homelands, which prolongs the commencement of CKD treatment and compromises health status. The extent of oral health knowledge that renal health workers have is dependant on the level provided by their tertiary institutes.

Conclusion:

Miwatj HAC already delivers oral health promotion programs and have an interest in improving oral health across their population groups. There is potential to engage programs that currently target people with CKD to address oral health. Providing oral health training for renal health workers and embedding oral health into the Miwatj renal disease program, which is currently undergoing development, will allow for improvements in health. Further research is required to consider a culturally appropriate manner of delivering oral health promotion as part of the program.



Bachelor of Oral Health 3rd year Research Presentation

Considering the use of Silver Diamine Fluoride in remote Aboriginal communities in East Arnhem Land

Presenter: Alexandra Pantelis

Supervisors: Ms Brenda Ryan & Professor Julie Satur

Background:

Silver Diamine Fluoride (SDF) is a non-invasive therapy used off label for caries management and prevention. SDF has been found beneficial for atraumatic caries treatment, particularly for non-compliant patients and for patients living in remote communities. Thus, it has the potential to be useful in remote Aboriginal communities in East Arnhem Land (EAL).

Aim and Objectives:

To investigate the benefits and barriers of clinical practice of SDF in remote Aboriginal communities in EAL, Northern Territory.

To understand the current evidence and EAL clinicians' perceptions regarding the use of SDF in remote Aboriginal communities. Thus, examining the barriers to application, including cost, utility, effectiveness, and access to training.

Method:

Discussions and observations were carried out with clinicians in EAL to assess the current use or disuse of SDF in remote Aboriginal communities in this region.

Results:

Clinicians did not report experiencing concerns regarding consent from the community for the use of SDF. They especially appreciated the benefits of SDF for use with non-compliant patients. The greatest barriers faced by clinicians were access to Continuing Professional Development (CPD) and the cost of the product, whereby other silver fluoride products were considered.

Conclusion:

Overall, clinicians were receptive to the use of SDF, understanding the evidence and benefits for clinical practice. However, application was limited due to financial constraints and access to CPD. For future studies it would be important to consider alternative methods of CPD delivery in remote communities; and investigate the benefits and disadvantages of water-based silver fluoride application in this community group.



Bachelor of Oral Health 3rd year Research Presentation

Exploring prenatal and early childhood oral health for Aboriginal (Yolgnu) communities in North East Arnhem Land, Australia.

Presenter: Keera Buswell

Supervisor: Professor Julie Satur & Ms Caroline Falconer

Background:

The oral health outcomes for Aboriginal Australians living in remote communities is comparably lower than that of non-Aboriginal populations. The East Arnhem Land Oral Health Plan (EALOHP) has been developed in an effort to address this inequality and identifies pregnancy and early childhood as critical life stages in the prevention of oral disease in Aboriginal populations.

Aims and Objectives:

To understand the barriers to oral and general health of the Yolgnu people of EAL and the need for prenatal and early childhood oral health interventions and to determine how oral health promotion (OHP) initiatives may be incorporated into existing health programs in a culturally sensitive and sustainable manner.

Method:

A literature review was undertaken into the effectiveness of existing prenatal and early childhood oral health promotion initiatives for Aboriginal communities living in remote regions. Following this, an immersive four week placement in EAL hosted by Miwatj Health Aboriginal Corporation was undertaken to observe the oral health related needs of Aboriginal communities and the challenges faced by health care workers in delivering oral health promotion.

Results:

The literature review highlighted the effectiveness of Aboriginal community run programs and the need for support to enable community ownership of their oral health outcomes. Observations completed in EAL confirmed the high rate of dental disease among the Yolgnu people. The needs assessment supported the call for OHP focusing on prenatal and early life interventions. This includes improving workforce oral health literacy, collaborative approaches and developing culturally appropriate, co-designed resources and strategies to deliver oral health promotion.

Conclusion:

There is a significant need for OHP initiatives to address prenatal and early childhood oral health in EAL. It is evident that various opportunities exist to embed oral health promotion into existing health care programs, however, the challenges of remoteness, cultural sensitivity and workforce retention remain. This identifies the need for collaboration among existing organisations and government agencies to combat these issues and address the oral health of the Yolgnu people.



Bachelor of Oral Health 3rd year Research Presentation

Use of Social Media for Oral Health Promotion in Rural and Remote Aboriginal Communities

Presenter: Elle Theodorakopoulos

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Background:

The East Arnhem Land Oral Health Plan has identified the potential for social media to be used as a health promotion strategy, and this project is designed to understand how best this might be achieved. The literature indicates that social media (including community radio) are becoming increasingly utilized and may be of benefit for use in oral health promotion, especially in rural and remote Aboriginal communities.

Aim and Objectives:

To understand the use, benefits and barriers of social media for oral health promotion amongst Aboriginal communities in East Arnhem Land (EAL), Northern Territory.

Method:

A review of literature and discussions with members of EAL communities and oral health professionals, as well as a 4-week clinical placement in EAL was undertaken. These allowed for an understanding of the way social media is currently being utilised in rural and remote Aboriginal communities, what health promotion programs are currently being run, and barriers which may be impacting oral health.

Results:

There was limited evidence surrounding this topic and none relating specifically to oral health promotion. However; there was support for the use of social media in health promotion, and Miwatj HAC have already used this approach as a smoking cessation initiative. Observations revealed that community radio, YouTube and Facebook were amongst the most commonly used mediums within the EAL communities. Children and young adults, who appeared to be social media literate, were happy to talk about their social media interactions. There are multiple languages spoken across the EAL communities, however, Yolngu Matha appears to be commonly spoken and understood.

Conclusion:

Health promotion programs in EAL communities must be designed in a collaborative manner to ensure relevance and acceptability. There is potential to use social media to bridge the geographic isolation in remote communities, however this may be dependent on WIFI bandwidth. These findings offer the basis for an effective program to be developed to aid in improving the overall oral health of rural and remote Aboriginal communities.



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