



---

# NATIONAL HEALTH ETHICS AND RESEARCH COMMITTEE ANNUAL REPORT (2015)

---

*NHERC Annual Report 2015*



**MINISTRY OF HEALTH**  
P.O Box 59 Vaiola Hospital

## **National Health Ethics and Research Committee (2015)**

### **National Health Ethics and Research Committee Final Report (2015)**

#### **Secretariat of the National Health Ethics and Research Committee**

**Period Covered:** January 05<sup>th</sup> 2015 – December 18<sup>th</sup> 2015.

#### **1. PURPOSE OF NHERC**

- 1.1. To improve the health of the Tongan people through supporting, promoting and upholding appropriate high quality health research that is consistent with Tongan people's context, values and standards;
- 1.2. To protect and safeguard the dignity, rights, safety, health and well-being of all Tongan people partaking in a research study or potential research participants;
- 1.3. To review and provide independent comment on the ethical and possible cultural problems that may arise in any aspect of health research;

#### **2. FUNCTIONS OF THE NHERC**

##### ***Ethical Review***

- 2.1. Provide independent, competent and timely review of the ethics of research proposals involving human participants;
- 2.2. To create and continually review Ethical Codes and Guidelines for personnel undertaking health-related research with human subjects and human tissue/parts involving the Ministry of Health;
- 2.3. To monitor all ethical aspects of health research and ensure health researchers uphold and conduct responsible and ethical research;

##### ***Health Research Policies and Processes***

- 2.4. The initiation and support for health research;
- 2.5. Development of a national research application form (R1);
- 2.6. Development, endorsement and enforcement of the Ministry of Health 'Health Research policy';
- 2.7. Development and enforcement of corresponding law, acts, guidelines and standards that assist, support and maintain ethical research practices;
- 2.8. Advising or informing the National Health Development Committee (NHDC) on health research policies and guidelines and health-related research proposals/studies;
- 2.9. The promotion and dissemination of health research results and the utilization of these results to the improvement of health practices and operations, health policy, and health care delivery to ultimately improve the health of the Tongan people;
- 2.10. Regularly review and update the Operational Guidelines and policies, if changes are required;

## National Health Ethics and Research Committee (2015)

2.11. The NHERC submits an annual report to the NHDC by March each year;

### ***Health Research and Ethics Development***

2.12. Fostering, recruitment, education, training and retention of individuals engaged in health research in Tonga;

2.13. The encouragement of health research initiatives by soliciting research proposals and applications, particularly in areas considered by the NHERC to have a high priority;

2.14. Develop and maintain close and supportive relationships with Institutions and researchers including charitable, private or other organizations that fund and conduct health research.

## 3. Progress Report

### Meetings

The NHERC had 3 Full Committee meetings during 2015 at bi-monthly to monthly intervals with 3 Expedited Review Circulations as summarized in the table below.

7 <sup>th</sup>	Full Committee meeting	29 <sup>th</sup> January 2015	Thursday
8 <sup>th</sup>	Full Committee meeting	19 <sup>th</sup> March 2015	Thursday
9 <sup>th</sup>	Expedited Review Circulation	15 <sup>th</sup> May 2015	Friday
10 <sup>th</sup>	Expedited Review Circulation	17 <sup>th</sup> July 2015	Friday
11 <sup>th</sup>	Full Committee meeting	27 <sup>th</sup> October 2015	Tuesday
12 <sup>th</sup>	Expedited Review Circulation	16 <sup>th</sup> December 2015	Wednesday

The Reason for the Expedited Review Circulations was because there were many undergraduate submissions, some events and in addition, the ethical approval submissions were sporadic which meant that for one quarter there were either one or two submissions which did not warrant the need for a Full Committee meeting.

### Members

The Secretariat of the National Health Ethics and Research Committee (NHERC) wishes to extend its utmost appreciation and gratitude to the following members for sparing their invaluable time and contribution to the NHERC's instigation and development. Without your aid and support the NHERC would not have taken flight to such great start. A big 'Malo' to you all.

#### **Current Members of the NHERC**

- ❖ Dr. Lisiate 'Ulufonua (Chairperson)
- ❖ Dr. Leiukamea Saafi (Clinical Representative)
- ❖ Dr. Reynold 'Ofanoa (Public Health Representative)
- ❖ Dr. 'Amanaki Fakakovikaetau (Dental Representative)
- ❖ Sr. Pinomi Latu (Nursing Representative)
- ❖ Sr. Tilema Cama (Nursing School/ Training Representative)
- ❖ Mr Sione Hufanga (Health Information System/ Training Representative)
- ❖ Mrs. Fatai Soakai (Community Representative) - **Retired**
- ❖ Mrs. 'Uini 'Aleamotu'a (Community Representative) - **Retired**
- ❖ Mr Sioape Kupu (Secretary)
- ❖ Mrs. 'Eu'ese Fetokai (Support Staff)

## National Health Ethics and Research Committee (2015)

### Milestones

It is always encouraging to see the development of the NHERC and the progress made throughout the year. It is more heartening to see some Research endeavours from our own Ministry of Health. These are some of the milestones the NHERC has reached for the year 2015 and is still moving to grasp higher goals in the near future.

- The 2 Community Representatives have retired. The Secretariat wishes to extend its utmost gratitude and appreciation to Mrs. Fatai Soakai and Mrs. 'Uini 'Aleamotu'a for their hard work and invaluable contribution to the Ethics Committee throughout the years. We hope your experience was that of a positive one and we wish you both good health and a much deserved break.
- 8 Final Reports have been submitted to the National Health Ethics and Research Committee this year.
  - 1 Evaluation Report on the 3<sup>rd</sup> Phase of the Kau Mai Campaign
  - 1 Master's Thesis on the Impact of Cataract on Poverty in Tonga by Julienne Faletau
  - 3 Organizational Final Reports were submitted, 2 from the Ministry Of Health Tonga (Dr. Reynold 'Ofanoa and Dr. 'Ofa Tukia) on Assessing Tongan smokers' responses to television advertisements on tobacco harms and Post-Mass Drug Administration Lymphatic Filariasis Transmission Assessment Survey and the third report on the Barriers to Physical Activity by Carroll Communications.
  - 3 Undergraduate Reports from Fiji National University were also submitted which includes the Prevalence and Factors Contributing to Obesity among Tongan High School senior students by Litia 'Ahoafi, Periodontal status and treatment needs of Down's Syndrome individuals by Dr. James Heimuli and the Dentition status and Treatment needs of Down's Syndrome individuals by Dr. Mele Foliaki.
- The NHERC reviewed 13 new proposals for the year of 2015. Details are outlined in Table 1 and Table 2.
  - 2 PhD Candidate Thesis
  - 2 Master's Thesis
  - 4 Undergraduate Proposals
  - 1 Evaluation
  - 4 Organizational/Individual Research
- From 2014 – 2015 there have been a total of 27 proposals submitted to the NHERC and have been reviewed and followed-up.
- Full Access to HINARI E-library was obtained on September 2015. The access to HINARI is currently being used by the nursing students and staff of QSSN. Access to other departments still underway.
- Health Research Policy still under development.
- Health Research Application Form (R2) is ready for distribution, feedback and comments from NHERC members.

## National Health Ethics and Research Committee (2015)

### NHERC Needs.

- ❖ Training Needs of Ethics Committee members. Due to the fact that the National Health Ethics and Research Committee is still starting its baby steps one must understand the current situation. Due to many of the NHERC members needing more training on ethical review the resulting constraint would be the dawdling progress in approving pending proposals. It is the wish of the Research Section to make decisions on research approvals faster and more punctual. So far, all duties and responsibilities of both the Ethics Committee members are self-taught and is a learning process as they progress and become more exposed and aware of their roles and duties, however formal training would bring out their full potential.
- ❖ The short-handed in staff: The Section requires a Research Assistant, because majority of the work-load is focused on the Secretary of the NHERC. Another support staff would help with all the administrative roles to ease and balance out the work-load. In addition, a policy analyst or advisor to assist in the development of the Health Research Policy, which is crucial.
- ❖ To establish a robust and comprehensive system that caters to the different types of proposals that are submitted and to review the proposals efficiently and in a timely manner.

### In Conclusion

In conclusion, the NHERC has gone very far and its future looks promising, a few bumps and tweaks to work on but all that can be handled in time, such as more efficient and prompt reviews, classification of proposals and policies. I would like to thank everyone involved; I cannot thank you enough for the support and time you have put into the NHERC and its duties. Here is to another year of awesomeness

Kindest Regards,

.....  
**Sioape Kupu**  
Health Research Officer Graduate  
NHERC Secretary

.....  
**Date**

**Table 1: Research Proposals Submitted and Approved**

#	Title	Principal Investigator / Local Investigator	Institution	Type of Review	Approval
15 <sup>th</sup>	The prevalence of chlamydia among pregnant women of Tonga	<b>Dr. Louise Fonua</b> <b>Dr. Veisia Matoto</b> (Supervisor)	University of Sydney	Full Committee Review – Master’s Thesis	<b>Submitted</b> on the <u>20/02/2015</u> and was granted an <b>Approval</b> on the <u>19/03/2015 for a duration of 1 year.</u>
16 <sup>th</sup>	Child Protection during emergencies and disaster risk reduction by Pacific Island Countries	Dennis Stuebing No Local Counterpart identified	University of Saint Joseph Macau	Full Committee Review – PhD candidate	<b>Submitted</b> on the <u>24/02/2015</u> and was granted a <b>Conditional Approval</b> on the <u>19/03/2015 for a duration of 1 year</u> – however because of some travel technicalities the study was <b>terminated</b> .
17 <sup>th</sup>	Prevalence and Factors contributing to Obesity among Tongan High School senior students in 2015	<b>Ms. Litia ‘Ahoafi</b> Mr. Napolioni Vulakouvaki (Supervisor)	Fiji National University	Expedited Review – Undergraduate	<b>Submitted</b> on the <u>07/04/2015</u> and was granted a <b>Conditional Approval</b> on the <u>15/05/2015 for a duration of 1 year.</u>
18 <sup>th</sup>	The extent to which changes in culture and lifestyle in particular health, exercise and diet, have had an impact on Tongan Society.	<b>Ms Jacinta Forde</b> Mrs. Fiona McCormack (Supervisor) <b>Fa’au Taumalolo</b> <b>Ma’ukakala</b>	University of Waikato	Full Committee Review – Master’s Thesis	<b>Submitted</b> on the <u>28/01/2015</u> and was granted a <b>Conditional Approval</b> on the <u>19/03/2015 for a duration of 1 year.</u>
19 <sup>th</sup>	One Netball Pacific Evaluation	Dr. Emma Sherry <b>Salote Sisifa</b>	LaTrobe University	Full Committee Review - Evaluation	<b>Submitted</b> on the <u>10/03/2015</u> and was granted a <b>Conditional Approval</b> on the <u>19/03/2015 for a duration of 2 years.</u>
20 <sup>th</sup>	Our Child Has Died	<b>Dr. Toakase Fakakovikaetau</b> Dr. Jane Skeen	Starship Blood and Cancer	Full Committee Review – Organizational / Individual Research	<b>Submitted</b> on the <u>13/03/2015</u> and was granted a <b>Conditional</b>

**National Health Ethics and Research Committee (2015)**

					<b>Approval</b> on the <b><u>19/03/2015</u></b> for a <b><u>duration of 1 year.</u></b>
21 <sup>st</sup>	The Processes and Impacts of Policy Changes to Improve Unhealthy Food Environments in Tonga	<b>'Etivina Lovo</b> <b>Lady Fane Fakafanua</b> <b>Sioape Kupu</b>	C-POND/ Fiji National University	Expedited Review (NHERC members were pre-disposed) – PhD Candidate	<b>Submitted</b> on the <b><u>13/05/2015</u></b> and was granted a <b><u>Conditional Approval</u></b> on the <b><u>17/07/2015</u></b> for a <b><u>duration of 2 years</u></b>
22 <sup>nd</sup>	The Tonga CARDioVAscular Risk - Investigation Project (The Tonga CAVARI Project) A Cardiovascular Risk Factor and Risk Marker Investigation in a Random Sample of Tongans	Dr. Ole Nyvad <b>Dr. Toakase Fakakovikaetau</b> <b>Dr. Sione Latu</b> <b>Dr. Loutoa Poese</b>	Department of Cardiology, Esbjerg Hospital	Full Committee Review - Organization	<b>Submitted</b> on the <b><u>24/09/2015</u></b> and was granted a <b><u>Conditional Approval</u></b> granted clarifications and questions are answered.
23 <sup>rd</sup>	Dengue in The Pacific, emerging public health responses – a Tongan Case Study.	Dr. Michal H. Dick <b>Dr. Reynold 'Ofanoa</b>	Volunteer Private Research.	Full Committee Review – Individual Research.	<b>Submitted</b> on the <b><u>24/08/2015</u></b> and was granted a <b><u>Conditional Approval</u></b> granted clarifications and questions are answered.
24 <sup>th</sup>	Health Outcomes after Valve-Replacement Surgery for Rheumatic Heart Disease in Tonga	Linda Thomson Mangnall <b>Dr. Toakase Fakakovikaetau</b>	Open Heart International	Full Committee Review + Expedited Review Organization	<b>Submitted</b> on the <b><u>19/09/2015</u></b> and was <b><u>approved</u></b> on the <b><u>31/08/2015</u></b> (Retrospective Approval) <b><u>for a duration of 5 years.</u></b>
25 <sup>th</sup>	Periodontal status of Diabetic patients attending Vaiola Hospital, Tongatapu	<b>Ms Pilimilose Moleni</b> Dr. Ashneeta Prasad (Supervisor)	Fiji National University	Expedited Review Undergraduate	Pending Review and Approval <b>Submitted</b> on the <b><u>10/12/2015</u></b>
26 <sup>th</sup>	Oral Health Status and Related Risk Factors among Rheumatic Heart Disease Patients age 12-19 years old in Tongatapu	<b>Mr Sione H. Tongia</b> Dr. Temalesi King (Supervisor)	Fiji National University	Expedited Review Undergraduate	Pending Review and Approval <b>Submitted</b> on the <b><u>23/11/2015</u></b>
27 <sup>th</sup>	To study the clinical effect of short spin cross match	<b>Mr Semisi Lenati</b>	Fiji National University &	Expedited Review Undergraduate	<b>Submitted</b> on the <b><u>01/06/2015</u></b> and has been <b><u>approved</u></b> on the

**National Health Ethics and Research Committee (2015)**

(immediate spin) cross-match and complete cross match red cells transfused to patients at Vaiola Hospital”	Dr. 'Eka Buadromo (Supervisor)	Laboratory Section Ministry of Health.	<u><b>21/12/2015 for a duration of 1 year.</b></u>
--	--------------------------------	---	--

**Table 2: Summary of Research Proposals Submitted and Approved**

	<b>Title</b>	<b>Principal Investigator / Local Investigator</b>	<b>Summary</b>
1	The prevalence of chlamydia among pregnant women of Tonga	<b>Dr. Louise Fonua</b> <b>Dr. Veisia Matoto</b>	<p>Chlamydia is hyper-endemic in small Pacific Island Countries and Territories and Tonga is no exception. Previous studies have shown that the rate of chlamydia among pregnant women in Tonga is high. Tonga responded by implementing various STI control strategies over the years in order to improve chlamydia testing, treatment and follow specifically in pregnant women and other at risk populations. A high proportion of women with chlamydia are asymptomatic therefore screening is the only way to determine if they have an infection or not. Chlamydia can cause adverse pregnancy outcomes for both the mother and/or the baby.</p> <p>This study aims to determine the rate of chlamydia among pregnant women of Tonga and the behavioural factors that may predispose these women to chlamydia infection. The study is significant as it will provide an insight into the effectiveness of Tonga’s STI prevention and control program. It will identify areas that needs improving and the information gathered will enable the Ministry of Health to design and implement cost effective policies and programs to address the high rates of chlamydia in Tonga. It will also provide information on targeted interventions that is required to improve antenatal care.</p>
2	Child Protection during emergencies and disaster risk reduction by Pacific Island Countries	Dennis Stuebing No Local Counterpart identified	<p>The objective of the research is to answer the question: how is child protection addressed in emergencies and disaster risk reduction in Pacific Island Countries (PIC)? The research will also answer the following sub-questions:</p> <ol style="list-style-type: none"> <li>1. What are the formal/informal components of child protection systems in PICs?</li> </ol>



**National Health Ethics and Research Committee (2015)**

			<ol style="list-style-type: none"> <li>2. Who are the key stakeholders in child protection, emergency response and disaster reduction in PICs and what are their roles?</li> <li>3. How can lessons learned/informative practices and models to address child protection in emergencies and disaster risk reduction be applied in PICs?</li> <li>4. How are children engaged in emergencies and disaster risk reduction in PICs and does their participation enhance their protection?</li> </ol> <p>PICs are largely absent from literature on child protection in emergencies and disaster risk reduction. The research will contribute new knowledge where it is lacking on rights-based approaches to development and child protection systems in PICs. The research is qualitative and applied; it aims to contribute to policy dialogue during a critical time in relation to the issues of study in the region. The research will employ Fiji and Tonga as explanatory case studies. Four data collection techniques will be used: document review, interviews, focus groups (using photo-voice), and observation.</p>
3	Prevalence and Factors contributing to Obesity among Tongan High School senior students in 2015	<b>Ms. Litia 'Ahoafi</b> Mr. Napolioni Vulakouvaki (Supervisor)	<p>The aim of the research is to investigate the prevalence and causal factors of obesity among Tongan high school students in 2015. The objectives of the study is to evaluate the prevalence of obesity among Form 5, 6 and 7 students in Tongatapu aged between 15 and 20 through calculation of their BMI and to identify the factors causing Obesity among the students.</p> <p>The study utilizes a Descriptive Cross-Sectional Study using questionnaires, a data collection sheet form with weighing scales and measuring tape High Schools in Tongatapu Island involving Senior High School Students in Forms 5, 6 and 7 between the ages of 15 and 20. The Independent variables for the study include:</p> <ol style="list-style-type: none"> <li>1. Age</li> <li>2. Exercise</li> <li>3. Physical Education Classes</li> <li>4. Dietary Patterns</li> <li>5. Sleep/Rest</li> </ol> <p>And the Dependent Variable is the BMI of high school students.</p>

**National Health Ethics and Research Committee (2015)**

4	The extent to which changes in culture and lifestyle in particular health, exercise and diet, have had an impact on Tongan Society.	<p><b>Ms Jacinta Forde</b> Mrs. Fiona McCormack (Supervisor) <b>Fa’au Taumalolo</b> <b>Ma’ukakala</b></p>	<p>The aim of the research is to investigate the extent in which the changes in Tongan culture and lifestyle have had an impact on Tongans lives, in particular their health. I will utilize the method of participant observation to conduct field research in Tonga within my family network. Gaining an inside look into how my family go about their day-to-day activities, the food they eat and how they prepare it, as well as having conversations with them about the past and now, will help to give me the rich data needed when doing ethnographic research. Participant observation along with semi-structured interviews with health professionals, government officials and nobles, will also help to give my findings more depth, as well as the use of secondary sources such as journal articles and literature already available.</p> <p>Given the nature of the research, there is no foreseen health impacts for those involved, other than the possibility that this research raises more awareness about the potential impacts these changes in culture have had on Tongan’s lives.</p>
5	One Netball Pacific Evaluation	<p>Dr. Emma Sherry <b>Salote Sisifa</b></p>	<p>The One Netball Pacific program is a 3-year sport for development program delivered by Netball Australia into the Pacific Islands (specifically Tonga, Samoa and Vanuatu. This program is funded by the Australian Sports Commission with the support of Ausaid to use the sport of netball to:</p> <ol style="list-style-type: none"> <li>1) Increase physical activity through netball within these communities and</li> <li>2) To develop female leadership capacity within these communities.</li> </ol> <p>Netball Australia has been delivering sport for development programs in the Pacific region to 1) encourage increased physical activity through netball and 2) develop female leadership capacity. This research will evaluate this program via interviews with program participants and stakeholders.</p>
6	Our Child Has Died	<p><b>Dr. Toakase</b> <b>Fakakovikaetau</b> Dr. Jane Skeen</p>	<p>As health professionals in children’s cancer for many years, we have noticed that many Pacific Island families struggle when they have a child die from cancer in New Zealand. There is no published research about how people deal with a child’s death when they are away from their usual family and cultural support. So in this study we want to find out more about:</p> <ul style="list-style-type: none"> <li>❖ How Pacific Island families manage during this time</li> </ul>

**National Health Ethics and Research Committee (2015)**

			<ul style="list-style-type: none"> <li>❖ Whether the ‘rituals’ around dying, death and bereavement that would be undertaken in the Island environment can still happen in New Zealand in a similar way</li> <li>❖ What impact any differences have on how families cope and grieve after their child’s death</li> </ul> <p>Families will be visited and interviewed in their homes (or at an alternative venue if they prefer). The interviews of families relating the events of their child’s terminal illness, death and funeral will be recorded.</p> <p>The recorded interview will be translated, transcribed and then transferred onto a CD. A copy of the transcripts will be available should the families choose to receive one.</p> <p>The data will then be analysed using thematic analysis.</p> <p>What we find out in this study may help to improve how we support Pacific families in the future and may lead to further research.</p>
7	The Processes and Impacts of Policy Changes to Improve Unhealthy Food Environments in Tonga	<b>‘Etivina Lovo Lady Fane Fakafanua Sioape Kupu</b>	<p>This PhD research study aims to:</p> <ul style="list-style-type: none"> <li>(i) Understand the policy process and assess the impacts of (a) “Tonga School Food Policy 2012-2015”.</li> <li>(ii) Understand the process of the policy recommendation (b) “to prevent the use of children in unhealthy food advertising and sponsorship in Tonga”, which is not yet implemented, and the barriers to its implementation;</li> <li>(iii) To consider any lessons for future non-communicable disease prevention policy, for the Pacific and other jurisdictions.</li> </ul> <p>The study is of a qualitative nature employing case study research methodology. The research will be assisted by a Tongan counterpart from the Ministry of Health Tonga, during the data collection phase of the study. The focus will be on policies (a) and (b) above.</p> <p>Qualitative data collection methods will be utilized:</p>

**National Health Ethics and Research Committee (2015)**

			<ul style="list-style-type: none"> <li>❖ Face to face interviews, using a semi-structured questionnaire with key informants who are policy makers. Up to twenty interviews, of approximately one hour duration, will be conducted. (Questionnaire is attached as Appendix 1)</li> <li>❖ Policy makers from the Ministry of Education will be asked about policy processes and impacts of the school food policy at the national level.</li> <li>❖ Further face to face interviews will be conducted with representatives of school communities. (Questionnaires are attached as Appendix 2)</li> <li>❖ Document analysis will be conducted to validate data.</li> </ul>
8	<p>The Tonga <b>CA</b>r<b>di</b>o<b>V</b>A<b>sc</b>ular <b>R</b>isk - Investigation Project (The Tonga CAVARI Project) A Cardiovascular Risk Factor and Risk Marker Investigation in a Random Sample of Tongans</p>	<p>Dr. Ole Nyvad <b>Dr. Toakase Fakakovikaetau</b> <b>Dr. Sione Latu</b> <b>Dr. Loutoa Poesse</b></p>	<p>Tongans are generally large, and a major proportion of Tongans are overweight or obese. Recent studies have found this metric to be increasing, and have raised the suspicion that it may lead to increasing health problems in the Tongan population, especially those caused by diseases of the heart and circulation.</p> <p>In 1988 a research group found that some risk factors for heart disease were less common in a group of Tongans than might be expected from their overweight, and this lead them to a hypothesis of “healthy overweight”, and made them speculate that this phenomenon might be due to genetic or environmental factors.</p> <p>In 2012 an analysis of mortality data for Tonga from 2001 to 2009 found that non-communicable diseases were having a profound limiting effect on the health status in Tonga and on Tongan Life Expectancy, and also that incomplete capture of these data resulted in erroneous and misleading mortality estimates.</p> <p>Also in 2012 a research group analysed death certificates for all deaths in Tonga for 2001 to 2008. They found non-communicable diseases to be leading adult mortality, and also concluded that mortality from diseases of the heart and circulatory system in Tongans had increased dramatically from approximately 225 per 100.000 per year in 2001-2004 to about 400 per 100.000 per year in 2005-2008.</p> <p>The uncertainty about the expected versus the actual mortality caused by heart and circulatory disease has lead us to propose this study. It compares the expected mortality from these diseases, based on a very thorough investigation of risk factors</p>

**National Health Ethics and Research Committee (2015)**

			known - or presumed - to promote heart and circulatory diseases and mortality, with the officially recorded mortality from heart and circulatory diseases in Tongans. The results of this study may strengthen or weaken the hypothesis of “healthy overweight in Tongans”, and the study will sample material for a subsequent genetic study, if such a hypothesis is found to be credible
9	Dengue in The Pacific, emerging public health responses – a Tongan Case Study.	Dr. Michal H. Dick <b>Dr. Reynold ‘Ofanoa</b>	<p>Although most patients recover with basic supportive therapy, dengue can still impact significantly on workplace productivity and the livelihoods of thousands of individuals in the Kingdom of Tonga. In order to limit the spread of Dengue, mosquito protection such as nets, insect repellents, long sleeved clothing and public health approaches to decreasing the habitat of the mosquito, such as standing water reduction and insecticide spraying are currently utilised.</p> <p>Despite the hard work of the health promotion and public health officers during the recent epidemic, the Dengue outbreak lasted for months. Analysing the results of this epidemics in details, can provide us with better understanding as for how the disease was spread, what measures were taken appropriately to stop it, how effectively clinicians assessed the patients, and the how hospital staff managed the extreme cases. This may lead to better guidelines for readiness in the future, hence reducing the burden of Dengue in Tonga.</p>
10	Health Outcomes after Valve-Replacement Surgery for Rheumatic Heart Disease in Tonga	Linda Thomson Mangnall <b>Dr. Toakase Fakakovikaetau</b>	<p>The aim of this research is to examine the health-related outcomes of people in Tonga who have had valve surgery (VS) for rheumatic heart disease (RHD) performed by Open Heart International. Outcomes assessed include mortality, morbidity, health-related quality of life (HRQoL) and the impact of RHD preventative treatment and daily blood-thinning medicine has on daily life.</p> <p>The research design has two components (A) a pre-test, post-test design using surveys and the clinical record to determine outcomes relative to preoperative health status with follow-up at 1 year (B) a cross-sectional design using surveys and the clinical record to determine outcomes over the long-terms for people who have had VS since 1986.</p> <p>Participants will be identified from the OHI surgical list and OHI patient database and recruited preoperatively from Vaiola Hospital Nuku’alofa before surgery and</p>

**National Health Ethics and Research Committee (2015)**

			postoperatively via phone contact. Following informed consent, data will be collected from the clinical record on demographic, clinical and functional status and from participants using valid and reliable questionnaires for HRQoL, VS and RHD-related issues. These questionnaires take approximately 15 minutes and will be completed in person, in conjunction with an investigator.
11	Periodontal status of Diabetic patients attending Vaiola Hospital, Tongatapu	<b>Ms Pilimilose Moleni</b> Dr. Ashneeta Prasad (Supervisor)	<p>The study looks to determine the periodontal status of type 2 diabetics attending the diabetic clinic centre in Vaiola hospital, Tongatapu. The primary objectives of the study includes:</p> <ol style="list-style-type: none"> <li>1) Screening the periodontal status of diabetic patients attending the diabetic clinic at Vaiola Hospital, Tongatapu using modified CPI index.</li> <li>2) Determining the level of periodontal attachment loss among diabetic patients attending the diabetic clinic at Vaiola Hospital, Tongatapu.</li> <li>3) Investigating the presence of gingival bleeding among diabetic patients attending the diabetic clinic at Vaiola hospital, Tongatapu.</li> <li>4) Determining the trend between diabetes control and periodontal status of patients attending the diabetic clinic at Vaiola hospital, Tongatapu.</li> </ol> <p>The proposed study is a cross-sectional study, the classic descriptive study which looks at exposure and disease outcome at the same point in time. The study basically looks at whether being a diabetic patient has any effect on the Dependent Variables which are:</p> <ul style="list-style-type: none"> <li>❖ Modified CPI score</li> <li>❖ Periodontal clinical attachment loss</li> <li>❖ Gingival bleeding</li> <li>❖ Blood glucose level through patient record</li> </ul>
12	Oral Health Status and Related Risk Factors among Rheumatic Heart Disease Patients age 12-19 years old in Tongatapu	<b>Mr Sione H. Tongia</b> Dr. Temalesi King (Supervisor)	<p>The study aims to investigate the oral health status and related risk factors among RHD patients 12-19 years of age attending cardiac clinic in Vaiola Hospital. The primary objectives of the study are:</p> <ol style="list-style-type: none"> <li>1) To determine the caries experience (DMFT/dmft) of RHD patients.</li> <li>2) To determine the Plaque and gingival index scores of RHD patients.</li> <li>3) To determine the socioeconomic status of parents of RHD patients.</li> </ol>

**National Health Ethics and Research Committee (2015)**

			<p>4) To determine the oral hygiene practices (tooth brushing, dental flossing, interdental brushing, mouth rinsing) of RHD patients.</p> <p>5) To determine the frequency of dental visits of RHD patients within the last 12 months.</p> <p>The study utilizes a cross sectional method of the oral health status and related factors in Rheumatic heart disease patients age 12 to 19 years old attending cardiac clinic in Vaiola Hospital. The study sample will be picked from the RHD disease patient age 12 to 19 years old who are attending cardiac clinic in Tongatapu. Predisposing factors like Age, Sex, Address and Socioeconomic Support of Parents will be taken into account and how it affect the Dependent Variables which include:</p> <ul style="list-style-type: none"> <li>❖ DMFT/dmft</li> <li>❖ Plaque Index</li> <li>❖ Gingival Index</li> </ul>
13	To study the clinical effect of short spin cross match (immediate spin) and complete cross match red cells transfused to patients at Vaiola Hospital”	<b>Mr Semisi Lenati</b> Dr. ‘Eka Buadromo (Supervisor)	<p>This research is to find out whether there is any clinical difference between two cross-matching processes of blood to be transfused to patients, namely short spin (immediate spin) cross-matching and complete cross-matching.</p> <p>The process will involve collecting and analysing data from patient’s clinical records and laboratory records of those who have transfused with blood which have been cross-match using the two processes mention above.</p> <p>The outcome will be used to decide future policies to be use in cross-matching of blood to be transfused to patients.</p>