



## RESEARCH SECTION ANNUAL REPORT (2015).

**Section:** Health Research  
**Division:** Health Planning and Information Division  
**Station:** Vaiola, Tongatapu  
**Section Head:** Mr. Sioape Kupu – *Health Research Officer Graduate*  
**Reports to:** Mr. Sione Hufanga – *Principal Health Planning Officer*

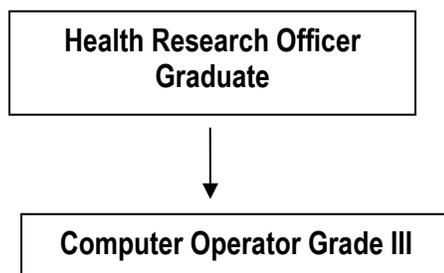
### 1. Mission Statement

The Health Research Section is responsible for effectively and efficiently managing, regulating, monitoring, developing and implementing health-related research activities and projects of and involving the Ministry of Health.

### 2. Staff Establishment as of 31<sup>st</sup> December 2015

Title	Officer's Name	No. of Post	Post Filled	Vacancies
Health Research Officer Graduate	Mr. Sioape Kupu	1	Yes	None
Computer Operator Grade III	Mrs. 'Eu'ese Fetokai	1	Yes	None

### 3. Sectional Structure



### 4. Staffing and Financial Information:

Post	Salary Scale
Health Research Officer Graduate	Band L
Computer Operator Grade III	Band O

### 5. Sectional Objectives:

- Managing and Monitoring all research proposals/applications submitted to the Ministry of Health;
- Providing Secretariat for the National Health Ethics and Research Committee which reviews and approves research proposals;
- Developing a health research policy;
- Strengthening the Research Capacity of the Ministry of Health;
- Identifying health research needs of the Ministry of Health;
- Building and supporting relations and collaborations with Sections, Divisions, Organizations both locally, regionally and internationally in promoting and developing research;



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- g) Responsible for the Management and Development of the Cancer Registry within the Ministry of Health;
- h) Collecting and Analyzing Cancer data for Research purposes.

### 6. Statistical Information / Milestones for the Year.

1. 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.

#	Type of Meeting	Dates
1	Full Committee meeting	29 <sup>th</sup> January 2015
2	Full Committee meeting	19 <sup>th</sup> March 2015
3	Expedited Review Circulation	15 <sup>th</sup> May 2015
4	Expedited Review Circulation	17 <sup>th</sup> May 2015
5	Full Committee meeting	27 <sup>th</sup> October 2015
6	Expedited Review Circulation	16 <sup>th</sup> December 2015

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.

2. 8 Final Reports have been submitted to the National Health Ethics and Research Committee this year:
  - ❖ 1 Evaluation Report on the 3rd 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.
3. The NHERC reviewed 13 new proposals (1 proposal from previous year now noted) 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

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#	Ref. #	Title	Principal Investigator / Local Counterpart	Institution
1	190315.1	The prevalence of chlamydia among pregnant women of Tonga	<b>Dr. Louise Fonua</b> <b>Dr. Veisia Matoto</b> (Supervisor)	University of Sydney
2	190315.2	Child Protection during emergencies and disaster risk reduction by Pacific Island Countries	Dennis Stuebing No Local Counterpart identified	University of Saint Joseph Macau
3	100515	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
4	190315.3	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
5	190315.5	One Netball Pacific Evaluation	Dr. Emma Sherry <b>Mrs. Salote Sisifa</b>	LaTrobe University
6	190315.6	Our Child Has Died	<b>Dr. Toakase Fakakovikaetau</b> Dr. Jane Skeen	Starship Blood and Cancer
7	130515	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
8	271015.1	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
9	271015.2	Health Outcomes after Valve Replacement Surgery for Rheumatic Heart Disease in Tonga	Linda Thomson Mangnall <b>Dr. Toakase Fakakovikaetau</b>	Open Heart Internationa
10	170815	Dengue in The Pacific, emerging public health responses – a Tongan Case Study.	Dr. Michal H. Dick <b>Dr. Reynold 'Ofanoa</b>	Volunteer Private Research
11	101215	Periodontal status of Diabetic patients attending Vaiola Hospital, Tongatapu	<b>Ms Pilimilose Moleni</b> Dr. Ashneeta Prasad (Supervisor)	Fiji National University
12	231115	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
13	181115	To study the clinical effect of short spin cross match (immediate spin) crossmatch and complete cross match red cells transfused to patients at Vaiola Hospital”	<b>Mr Semisi Lenati</b> Dr. 'Eka Buadromo (Supervisor)	Fiji National University & Laboratory Section Ministry of Health.



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In relation to review and approvals, there were (#s refer to above table).

- ❖ **Terminated after NHERC Review/Approval:** 4 studies (#2, #7, #8 and #10)  
Highlighted in **yellow**
- ❖ **Approved with Conditions:** 9 studies (#1, #3-6, #6, #9, #11-12).

4. From 2014 – 2015 there have been a total of **27 proposals submitted to the NHERC** and have been reviewed and followed-up (Refer to NHERC Annual Report 2015 for details).
5. Full Access to *HINARI* E-library was obtained on September 2015 and was a move towards promoting evidence-based practice and increasing access to knowledge and quality reading material. The access to *HINARI* is currently being used by the nursing students and staff of QSSN. Access to other departments still underway.
6. Health Research Policy still under development.
7. Health Research Application Form (R2) is ready for distribution, feedback and comments from NHERC members.
8. Continuation of the course “*Evidence-based Practice*” course for Third Year QSSN students. This is the second consecutive class for this course since 2014, with a total of 34 students for 2015.
9. A Seminar for the Year 3 nursing students was held on the 9th of December 2015. The Seminar was hosted by the Research Section in collaboration with the Queen Sālote School of Nursing (QSSN) with the theme “*Seek and You Shall Find*”. The seminar was dedicated to celebrating what the students had completed in their research assignment 2 on their respective research topics. The Seminar was overall a success and was the first of its kind to showcase what the students had achieve in their course “*Evidence-based Practice*” (Pictures below).



*Figure 1 & 2: Year 3 (Class of 2012) Research Seminar (Left) and Ms. Latu Fusimalohi with Mr. Sioape Kupu, facilitators and panel member for the Seminar (Right).*



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10. Mr. Sioape Kupu participated in the 5-day *HINARI* Training Workshop (Train the Trainer) at Suva, Fiji on the 16<sup>th</sup> – 20<sup>th</sup> November 2015 (Pictures shown below).



Figure 3 and 4: Tongan Representatives (Mr. Sioape Kupu) – receiving a Certificate for participation at the *HINARI* Training Workshop at Suva, Fiji (Left) and the *HINARI* Training Workshop Group Photo (Right)

11. Mr. Sioape Kupu attended the 2-day *Legal Policy Development Workshop* presented by the Australian Government/Attorney General’s Department in conjunction with Tonga’s Attorney General Department on the 19<sup>th</sup> of May 2015 – 20<sup>th</sup> of May 2015.





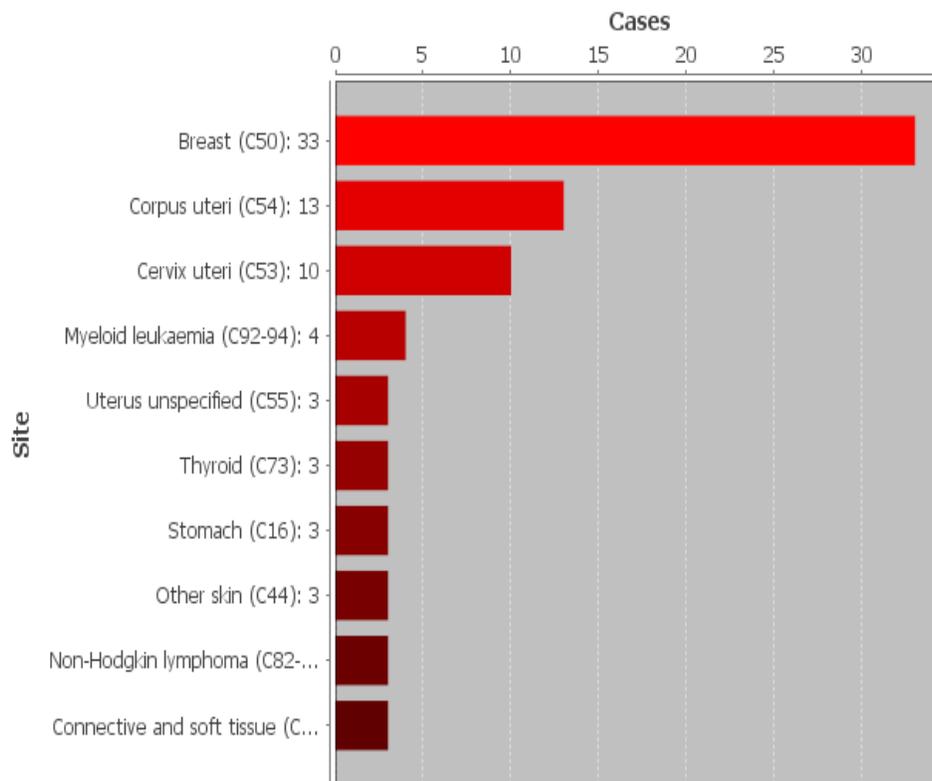
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12. Cancer Abstraction Form developed and in the process of being distributed to the Wards. Radiology Section has been instrumental by sending their X-ray, CT and USS reports weekly on cancer patients and backtracking their reports from 2013 to update the CanReg5 database.
13. Tri-monthly teleconference with the Cancer Control Center for early November with Dr. Karin Hohman of the Cancer Strategic Concepts. The teleconference is to provide an update on the current Cancer Control Plan of the Ministry of Health. This is a follow-up from last year's *Cancer Leadership Forum*.
14. **Ongoing work in Progress:** Various Aspects of the Research Policy are slowly coming into fruition. Sections like Research Proposal Submissions, Documentations, and Equity are complete. Other aspects like Intellectual Property, Copyright and Payment are to be incorporated into the document.
15. **Cancer Registry.**  
The Cancer Registry continuously collects a plethora of information regarding Cancer such as:
  - ❖ Incidence (shown in Graphs below)
  - ❖ Age
  - ❖ Sex
  - ❖ Topography
  - ❖ Morphology
  - ❖ Basis of Diagnosis
  - ❖ Address / Location (Villages)
  - ❖ Death Date
  - ❖ Primary Cause of Death (Cancer-related Deaths).Data from 2013 and 2014 from the Health Information System, Pathology, Radiology and Medical Records are being validated.



**16. Crude Top 10 Cases by Sex (Females for 2015).**

**Top 10 by CASES, Cancer Registry Tonga (2015), Female**



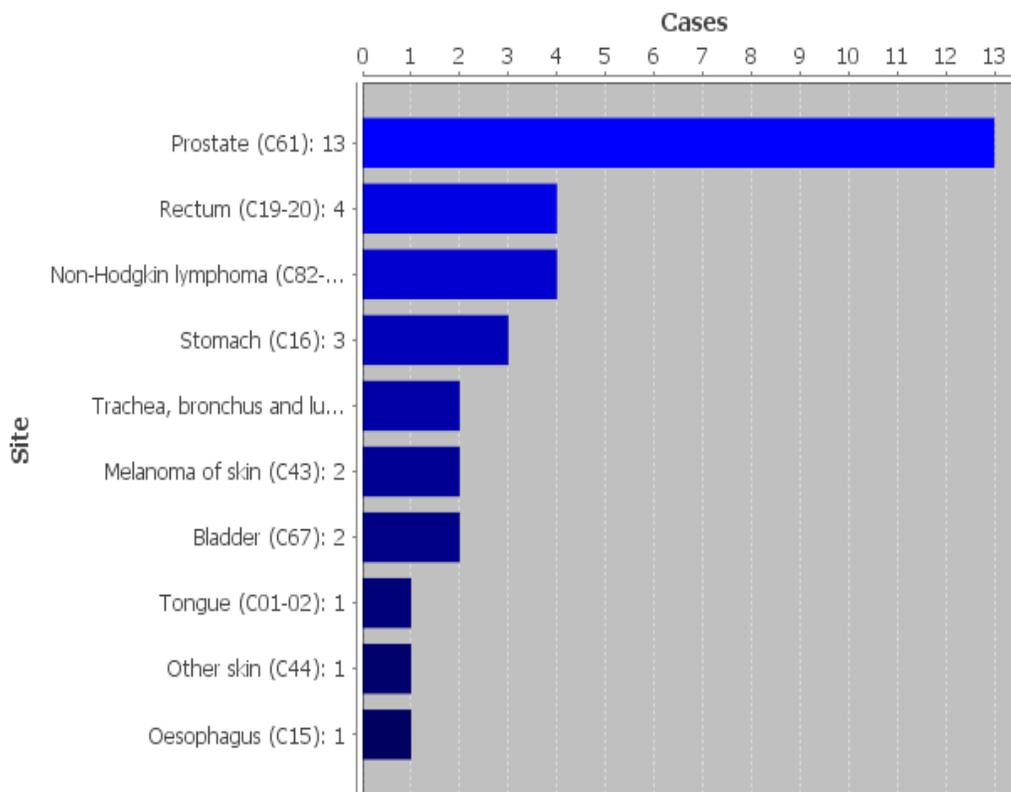
*Figure 4: Crude Top Cancer sites for Females (2015)*

The Top Cancer site for Females in 2015 is Breast with a total of 33 cases, followed by Corpus Uteri with 13 and thirdly Cervix Uteri with 10 cases. The disproportionate number of breast cancer cases can be attributed to a number of possible factors like the availability of better diagnostic tools like the Mammogram Machine, CT Scans, Fine Needle Aspirations, and Histopathology etc. The number of Breast Cancer cases have remained in the 30's since 2013 and remains so until today.



**17. Crude Top 10 Cases by Sex (Males for 2015).**

**Top 10 by CASES, Cancer Registry Tonga (2015), Male**



*Figure 5: Crude Top 10 Cancer Cases by Site for Males (2015).*

The Top Cancer site for Males is Prostate with 13, followed by Rectum with 4 and Non-Hodgkin lymphoma with a similar 4. In comparison to Females, Males have a lower incidence number. There are a multitude of possible factors like Males rarely present themselves when sick, do not follow-up or the diagnostic tools to pick up Cancers specific to males is not present or are only available when specialists visit. As a result, male cancers are sporadic.

**18. Obstacles**

With all things considered, with two staff at the Research Section, we have managed to accomplish a lot in relation to our functions. There are a few functions that are in progress but are hindered and limited by the human resources that we here in the Section have. The only obstacle is as follows:

**Training Needs of Ethics Committee members:** The *NHERC* members need 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.



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**Staff Shortage:** The Section requires a Research Assistant, with the inclusion of the Cancer Registrar in the Cancer Registry, she can assist with some Secretarial roles. In addition, a policy analyst or advisor to assist in the development of the Health Research Policy would be very much welcome.

**Reliever for Health Research Officer:** As the current Health Research Officer is going for further study, it is a necessity that a reliever for the post Health Research Officer be posted for the duration of the stay.

**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, alleviate these tasks gives more room for the current Health Research Officer Graduate to complete key tasks like Policy and Strategic Plans. These tasks can be completed by the current officer however running and managing the Section and completing these tasks to a high standard. With a strong policy, the Section can reign in researchers more effectively and regulate any unethical research conduct so that the Kingdom is not taken advantage for.

There are many research studies being offered to the Ministry to develop and implement, mainly to Public Health, a Research Team would be far more efficient than constantly hiring outside enumerators. The Research Section will be to conduct its own Research Needs without using the pool of staff from other Sections whom are already overloaded with work.

Without a Research Team, data and information vital to the functions and operations of the Ministry are sparse. This information is needed for Evidence-based Practice, Planning and Decision-making. A Ministry without a Research component is thus inefficient in its delivery of services and unable to effectively handle issues.

**Capacity Development:** There is only one Officer (COGIII) who is collecting data, there is a lot of cancer data from different sources (Death Certificates, Lab X-ray, Dental Wards, Outside Organizations) to collect and register to the *CanReg5* database. The skill development of the current Officer is necessary to maintain the service and the addition of another Officer to assist in data collection and maintain rapport with the Clinical wards can alleviate the workload to a more bearable state. Without any Cancer data, cancer control efforts cannot be initiated and the progress of any cancer efforts can be measured and monitored to identify any successes and weaknesses.

**Collaboration with Wards in relation to Cancer Abstraction:** Many of the wards are co-operative with the Data Abstraction, especially Surgical and Pediatrics. However, some Wards are not so co-operative, this may be due to the workload and availability of the Medical Officer in Charge. As a result, majority of cases at the Medical and Obstetrics Wards are not registered and their trends not represented captured.

### 19. Additional Comments:

The Research Section is currently running on its bare minimum and the majority of the workload rests on one individual since 2014, when the Section was revived. For three years the Section has been functioning and developing further. Just because the Section is running well in relation to what it has, it should not be neglected. The Section should not feel so limited because of the progress it has done so far but rewarded even if a little. The addition of other Officers will help



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alleviate the workload and allow room for further development of the Section as the current Officer in charge of the Section is more than capable to train more Officers.

My only comment is that if the Ministry at least values or invests in Research, may it please allocate a little bit of human resources to the Section to aid in its functions and develop the Section more.

Thank you very much.

Yours Sincerely,

.....  
Sioape Kupu  
Health Research Officer Graduate