



# PACIFIC ISLANDS HEALTH RESEARCH SYMPOSIUM 2023

## CONFERENCE PROCEEDINGS

Fiji Institute of Pacific Health Research (FIPHR) of the College of Medicine,  
Nursing and Health Sciences (CMNHS) at the Fiji National University (FNU)

Title: Pacific Islands Health Research Symposium 2023  
Conference Proceedings

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Pacific Islands Health Research Symposium 2023 Delegates  
PC: Ministry of Health & Medical Services Fiji

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# ACRONYMS & ABBREVIATIONS

<b>AMR</b>	Antimicrobial Resistance
<b>CMNHS</b>	College of Medicine Nursing and Health Sciences
<b>C-POND</b>	Pacific Research Centre for the Prevention of Obesity and Non-Communicable Diseases
<b>CWMH</b>	Colonial War Memorial Hospital
<b>ED</b>	Emergency Department
<b>FBO</b>	Faith-Based Organisation
<b>FIPHR</b>	Fiji Institute of Pacific Health Research
<b>FNU</b>	Fiji National University
<b>HIV</b>	Human Immunodeficiency Virus
<b>LMICs</b>	Low and Middle Income Countries
<b>NCD</b>	Non-Communicable Diseases
<b>PICT</b>	Pacific Island Countries and Territories
<b>Q&amp;A</b>	Question and Answer
<b>RHD</b>	Rheumatic Heart Disease
<b>RISE</b>	Revitalising Informal Settlements and their Environments
<b>T2DM</b>	Type 2 diabetes mellitus
<b>TB</b>	Tuberculosis
<b>WGS</b>	Whole Genome Sequencing
<b>WHO</b>	World Health Organization
<b>WISH</b>	Watershed Interventions for Systems Health

## GLOSSARY

<b>Vanua</b>	A word used in several Austronesian languages including native Melanesian languages commonly meaning land, home or village with deeper meanings encompassing people, culture, tradition, values and beliefs. In Polynesian languages is translated to fenua, whenua or fonua.
<b>Talanoa</b>	A word used in many Pacific languages meaning to tell a story, have a conversation or share ideas.



# FOREWORD

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It is my great pleasure to introduce the proceedings of the Pacific Islands Health Research Symposium (PIHRS) 2023. The symposium is the annual flagship event of the Fiji Institute of Pacific Health Research (FIPHR) of the Fiji National University (FNU), College of Medicine, Nursing and Health Sciences (CMNHS). Since 2020, FIPHR has aimed to produce, support, enhance and develop health research activities at the College to address national and regional health priorities. Despite the challenges and limitations presented by the COVID-19 pandemic, the institute was able to contribute to the pandemic response and has expanded significantly in the past three years. Major developments include the launch of a new Research Centre for Communicable Disease Research; a Pacific Health Observatory; and a Research Laboratory Facility with Genomics testing capability.

The initiation of a Pacific Health Observatory at FIPHR will provide a regional platform for the translation of health research into policies and actions towards improved health. The critical need for translation of health evidence into decisive actions for change inspired the theme of this year's PIHRS: "Bridging the Policy Gaps: Pacific Health Evidence to inform Pacific Health Decisions". Whilst many health-related conferences outside the Pacific welcome Pacific Research presentations, PIHRS is the only Pacific-led conference that specifically aims to feature Pacific-based Health Research for directly informing policies and actions towards health in the region.

The COVID-19 pandemic disrupted many health research projects and the delivery of PIHRS. The 2023 PIHRS was the first in-person conference following the pandemic and presented the opportunity for researchers investigating the Health of Pacific populations to share findings across a wide range of topics including the impact of COVID-19. Findings shared at this symposium are expected to illuminate drivers of poor health outcomes, improve understanding for effective service delivery, identify areas for new research and provide evidence for catalysing change in Pacific Health Systems and Systems Thinking. Regional support for the symposium through the Pacific community and from the Fiji Ministry of Health and Medical Services are positive indicators that the importance of research for informing health policies has been recognised, which will promote the impact of findings presented here.

FIPHR's efforts to directly address the critical need to bridge evidence to action is commendable and will provide a stimulus for researchers at all levels to formulate questions that will directly impact health decisions.

Vinaka Vakalevu

**Dr. William May**

**DEAN**

**College of Medicine, Nursing and Health Sciences, FNU**

# MESSAGE FROM THE CHAIR



**Associate Professor, Dr. Donald Wilson**  
Associate Dean Research,  
Director, Fiji Institute of Pacific Health Research,  
College of Medicine, Nursing and Health Sciences

Since its inception in 2019, the Fiji Institute of Pacific Health Research (FIPHR) has envisioned the creation of knowledge translation platforms where collaborative health research designed to inform health decisions in the Pacific could be shared within the Pacific and to the wider world. The Pacific Islands Health Research Symposium (PIHRS) was created to allow pacific-minded researchers to showcase their projects, share their findings, and to provide a platform for rigorous discussion of how these findings may influence policies and actions for improving the health of Pacific people. The COVID-19 pandemic had a profound impact on Pacific Health Systems, pivoting priorities away from research and severely limiting many health projects and the delivery of PIHRS. This year we have had the privilege of being able to host another PIHRS in Fiji, and were pleased to receive the number of abstracts that were submitted for consideration.

In total, 87 oral and poster presentations were made at PIHRS 2023 on a wide array of diseases, conditions and systems currently being investigated in the Pacific region. Rousing Keynote speeches addressed frameworks for informing action, the need for multi sectoral responses to the Non-Communicable Disease crisis and, a reminder of the vast impact of climate change. Panel discussions provoked discussions on research-policy-implementation gaps in priority health research areas identified in FIPHR's strategic plan. It was encouraging to note the number of clinical research projects included in this year's Symposium and the representation from Pasifika researchers in New Zealand exploring health amongst the Pacific diaspora. FIPHR hopes to stimulate the continued growth of Health Research in the region through platforms such as PIHRS. It is hoped that conference proceedings presented here and the research evidence they summarise will be used to inform Health decisions that will improve Health in the Pacific Region in years to come.

# 1.0 KEYNOTE PRESENTATIONS

## 1.1 Bridging the Gaps: Pacific Health Evidence to inform Pacific Health Decisions, Professor Mahomed Patel

*Professor Mahomed Patel is an Emeritus Professor at the Australian National University and an Adjunct Professor at Fiji National University*

Professor Patel focused on gaps between research, policy, and implementation; disparities between Western knowledge and indigenous knowledge systems; and the imperative to move towards knowledge synergies. The overarching theme of this keynote was the need for Pacific evidence to play a more prominent role in informing health decisions in the Pacific region.

## 1.2 Addressing Non-Communicable Diseases in the Pacific: A Health Promotion Approach, Dr. Gade Waqa

*Dr. Gade Waqa is the Head of the Pacific Research for the Prevention of Obesity and Non-Communicable Diseases (C-POND), a WHO Collaborating Centre for Obesity Prevention and Management within the Fiji Institute of Pacific Health Research (FIPHR)*

Dr. Waqa delivered a stark assessment of the significant burden faced by Fiji and the broader Pacific region. The impact of non-communicable diseases (NCDs) in the Pacific is among the most pronounced globally. Dr. Waqa gave a call to action, outlining strategies to mitigate the impact and offering a typology of primary health care to address the challenges with multifaceted cross sectoral approaches.

## 1.3 Climate Change and Health, Professor Karin Leder

*Professor Leder is Co-Lead of the RISE Program and Head of Infectious Disease Epidemiology at Monash University*

Professor Leder addressed the intricate and far-reaching impacts of climate change on public health, capturing both direct and indirect consequences across various dimensions of health. Professor Leder underscored the urgency of understanding and addressing these complex dynamics.

Full summaries of keynote presentations can be found in **Appendix A**.



# 2.0 PANEL DISCUSSIONS

## 2.1 Bridging the Research-Policy-Implementation Gaps in Universal Health Coverage & Primary Health Care in the Pacific

*Session Chair: Dr. Donald Wilson*

*Panel: Hon. Dr. Ratu Antonio Lalabalavu, Professor Mahomed Patel, Dr. Lepani Waqatakirewa, Mr. Sunia Soakai*

## 2.2 Bridging the Research-Policy-Implementation Gaps in Non-Communicable Diseases in the Pacific

*Session Chair: Dr. Gade Waqa*

*Panel: Professor Colin Bell, Dr. Devina Nand, Dr. Pritika Narayan, Dr. Oripa Waqa*

## 2.3 Bridging the Research-Policy-Implementation Gaps in Reproductive, Maternal, Child, Adolescent Health & HIV in the Pacific

*Session Chair: Dr. Kesaia Nawaqaliva*

*Panel: Dr. Jason Mitchell, Dr. Christopher Fox, Dr. Rachel Devi, Dr. Litia Narube*

## 2.4 Bridging the Research-Policy-Implementation Gaps in Climate Change & Health in the Pacific

*Session Chair: Dr. Timaima Tuiketeki*

*Panel: Professor Karin Leder, Dr Amelia Turagabeci, Ms. Ateca Kama*

## 2.5 Bridging the Research-Policy-Implementation Gaps in Communicable & Re-Emerging Infectious Diseases in the Pacific

*Session Chair: Dr. Ana Ratu*

*Panel: Professor Philip Hill, Professor James Ussher, Dr Aalisha Sahukhan, Dr. Van Mai Cao Lormeau*

A full summary of panel discussions can be found in **Appendix B**.

# 3.0 ORAL SESSION SUMMARIES

## 3.1 Non-Communicable Diseases

### 3.1.1 Session One, 04/09/2023 AM

Session Chairs: Dr. Anne-Marie Thow & Dr. Cath Conn

- 3.1.1.1 *Opportunities and perceptions to promoting physical activity and reducing screen time in the Pacific Islands*  
Presenter: Ms. Sarah T. Ryan
- 3.1.1.2 *HCPF: Intervention to improve Nutrition and Physical Activity of Primary School children in Suva*  
Presenter: Dr. Pragya Singh
- 3.1.1.3 *Progress on food taxation and subsidies in Tonga and the Pacific*  
Presenter: Dr. Viliami Puloka
- 3.1.1.4 *Physical activity among T2DM patients: Prevalence, barriers, facilitators, and clinical correlates - A descriptive cross-sectional design*  
Presenter: Ms. Shofeen Fahra Naz Begum

### 3.1.2 Session Two, 04/09/2023 PM

Session Chairs: Dr. Pragya Singh & Ms. Ateca Kama

- 3.1.2.1 *Diabetes Cam: An objective methodology to study diabetes self-management*  
Presenter: Ms. Keresi Rokorua Bako
- 3.1.2.2 *Healthy and sustainable food systems for the Pacific: Policy review to community action*  
Presenter: Dr. Cath Conn
- 3.1.2.3 *Challenges and enablers to eating healthily: a Photovoice study with adolescents attending secondary schools in Fiji*  
Presenter: Ms. Viola Lesi

### 3.1.3 Session Three, 05/09/2023 AM

Session Chairs: Professor Colin Bell & Dr. Silina Motofaga

- 3.1.3.1 *Investigating Acute Coronary Syndrome in Fijian Population living in Aotearoa-NZ*  
Presenter: Dr. Pritika Narayan

- 3.1.3.2 *Tongan New Zealanders' views on the National Bowel Cancer Screening programme*  
Presenter: Dr. Viliami Puloka
- 3.1.3.3 *Encouraging healthy eating and physical activity through experiential learning in children's museums*  
Presenter: Mrs. Sumantla Varma
- 3.1.3.4 *Reversing T2DM with Low Carb Diet (LCD) and an 8-10hr restricted eating time*  
Presenter: Dr. Zen Low

#### 4.1.4 **Session Four, 05/09/2023 PM** Session Chair: Dr. Pritika Narayan

Presenters: Global Alliance of Chronic Disease (GACD) Dr. Gade Waqa, Dr. Anne-Marie Thow, Ms. Aliyah Palu, Professor Colin Bell, Dr. Briar McKenzie

## 3.2 **Communicable Diseases**

### 3.2.1 **Session One, 04/09/2023 AM** Session chair: Professor Philip Hill

- 3.2.1.1 *A tuberculosis elimination-focused geospatial approach to optimising access to diagnostic Gene-Xpert machines in Fiji*  
Presenter: Mr. George Bates
- 3.2.1.2 *Typhoid fever among health workers linked to community outbreak: whole genome sequencing to complement outbreak investigation*  
Presenter: Dr. Aneley Getahun Strobel
- 3.2.1.3 *Clonal Outbreaks of Carbapenem-Resistant Pathogens in Fiji Hospitals: Emergence, Transmission, and Implications for Control*  
Presenter: Mr. Sakiusa Baleivanualala
- 3.2.1.4 *Epidemiology, clinical and public health management of typhoid in the Northern Division, Fiji (2017-2019)*  
Presenter: Dr. Aneley Getahun Strobel

### 3.2.2 **Session Two, 04/09/2023 PM** Session Chairs: Professor Florian Marks & Professor Hazel Clottier

- 4.2.2.1 *Strengthening typhoid surveillance around a mass vaccination campaign in the Northern Division of Fiji*  
Presenter: Mr. Orisi Cabenatabu
- 3.2.2.2 *Island-wide environmental surveillance for Salmonella Typhi in a mass vaccination context in Fiji*  
Presenter: Mr. Pranit Kapoor
- 3.2.2.3 *Measuring the status of immunisation and drivers for vaccination in children with disability, Fiji 2023*  
Presenter: Ms. Unise Vakaloloma

### **3.2.3 Session Three, 05/09/2023 PM**

**Session Chairs: Professor James Ussher & Dr. Lucia Romani**

- 3.2.3.1 *Social and behavioural risk factors for communicable disease in Fiji***  
Presenter: Dr. Anaseini Ratu
- 3.2.3.2 *Antimicrobial stewardship awareness, practices and perceptions amongst Farmers, Physicians and Pharmacists in Fiji***  
Presenter: Dr. Royford Magiri
- 3.2.3.3 *Enteric pathogenic load in animals in urban informal settlements***  
Presenter: Mr. Revoni Vamosi
- 3.2.3.4 *Treating Hepatitis B Where WHO Guidelines Can Not Be Met***  
Presenter: Dr. Thomas Russell
- 3.2.3.5 *Epidemiology of Tuberculosis in Fiji, through an elimination lens: 2014-2021***  
Presenter: Mr. Isireli Koroituku
- 3.2.3.6 *A community prevalence study to measure the level of under detection of COVID-19 on Efate Island, Vanuatu***  
Presenter: Dr. Florita Toa Sitobata

### **3.2.4 Session Four, 06/09/2023 AM**

**Session Chairs: Dr. Aneley Getahun & Professor Stephen Howie**

- 3.2.4.1 *The Application of Fluidigm Approach to Understanding AMR in Informal Settlements***  
Presenter: Mr. Autiko Tela
- 3.2.4.2 *Knowledge of Antimicrobial Use and Resistance Organisms from Small-Scale Commercial Poultry Farms in Fiji***  
Presenter: Ms. Shivani Singh
- 3.2.4.3 *Dairy Farming and Emerging Antimicrobial Resistance in Fiji***  
Presenter: Ms. Wati Mocevakaca
- 3.2.4.4 *Endoscopic Profiles and Helicobacter pylori Infection in Solomon Islands: A Four-Year Retrospective Study***  
Presenter: Dr. Stallone Kohia

## **3.3 Health Policy & Systems**

### **3.3.1 Session One, 04/09/2023 AM**

**Session Chair: Professor Stephen Jan**

- 3.3.1.1 *A Co-Design Project with Pasifika Communities to Address Health Inequities***  
Presenter: Dr. Malakai Ofanoa
- 3.3.1.2 *The Barriers and Enablers of Using ISBAR during Nurses Handover***  
Presenter: Mr. Sione Alalea

- 3.3.1.3 *Using Systems Science to Co-Create Health Engagement Policy at Brown Buttabean Motivation*  
Presenter: Dr. Faasisila Savila
- 3.3.1.4 *Emergency Nurses KAP Regarding Disaster Preparedness & Management in Emergency Departments, at the Northern Division, Fiji Islands*  
Presenter: Mr. Ajnesh Avinit Prasad

### **3.3.2 Session Two, 04/09/2023 PM**

**Session Chairs: Professor Mahomed Patel & Dr. Ana Ratu**

- 3.3.2.1 *Broker of Change: The WISH Project's Innovative Cross Sectoral Local Government Engagement*  
Presenter: Mr. Ratu Timoci Naivalulevu
- 3.3.2.2 *Cuban Cooperation for Health in the Pacific*  
Presenter: Dr. Sharon McLennan
- 3.3.2.3 *The Prevalence of Burnout Amongst Nurses in the Emergency Department in CWM Hospital, Suva*  
Presenter: Mr. Shanil Sukul
- 3.3.2.4 *Faith-Based Organizations in Health: The Perceptions of FBO Leaders in Addressing Health*  
Presenter: Ms. Arieta Latianara
- 3.3.2.5 *Prevalence and Consequences of Workplace Violence Against Emergency Nurses in the Northern Division, Fiji Islands*  
Presenter: Mr. Monish Vikash Deo

### **3.3.3 Session 3, 05/09/2023 PM**

**Session Chair: Dr. Suneil Nath**

- 3.3.3.1 *Surgical, Obstetric, and Anesthesia Care Capacity in the Fiji Islands*  
Presenters: Dr. Jope Makutu & Dr. Arunesh Sundar
- 3.3.3.2 *Fiji Oxygen Project - Partnership and Policy in Practice*  
Presenters: Ms. Udila & Professor Stephen Howie
- 3.3.3.3 *Critical Care Capacity in PICTs: Building on Challenges and Opportunities from COVID-19*  
Presenter: Dr. Silina Motofaga
- 3.3.3.4 *Auditing Hospital Admissions to Estimate the Burden of Sepsis in Clinical Settings in Kiribati*  
Presenter: Dr. Lamour Hansell
- 3.3.3.5 *Clinical Practice Guidelines: Their Utility, Dissemination, and Monitoring at CWMH – A Mixed Methods Study*  
Presenter: Dr. Ashnita Ashvini Krishna



## **3.4 Reproductive, Maternal, Newborn, Child & Adolescent Health**

### **3.4.1 Session One, 05/09/2023 AM**

Session Chairs: Dr. Christopher Fox & Litia Narube

- 3.4.1.1 *Sexual and Reproductive Health Education Policy and Services for Pacific Youth*  
Presenters: Dr. Radilaite Cammock & Mr. Malcolm Andrews
- 3.4.1.2 *Adolescent Understanding of Concepts Related to the Developmental Origins of Health and Disease: A Pacific Perspective*  
Presenter: Ms. Melenaito Tohi
- 3.4.1.3 *Reporting of Child Sexual Abuse in Fiji*  
Presenter: Dr. Adriu Naduva
- 3.4.1.4 *The State of Cervical Cancer Screening in Vanuatu: A Retrospective Analysis 2015-2020*  
Presenter: Dr. Boniface Damutalau

### **3.4.2 Session Two, 06/09/2023 AM**

Session Chairs: Professor Cameron Grant & Dr. Rachel Devi

- 3.4.2.1 *Epidemiology of Rheumatic Heart Disease in Fiji*  
Presenter: Ms. Poonam Pal
- 3.4.2.2 *Rheumatic Fever and RHD-Related Knowledge, Attitudes, Practices, and Health-Seeking Experiences in Fiji*  
Presenter: Mr. Roneel Chandra
- 3.4.2.3 *Lived Experiences of Patients With Rheumatic Heart Disease and their Access to Services in Fiji*  
Presenter: Ms. Jyotishna Mani

### **3.4.3 Session Three, 06/09/2023 AM**

Session Chairs: Professor Stephen Howie & Dr. Kesaia Nawaqaliva

- 3.4.3.1 *Incidence and Clinical Outcomes of Maternal and Congenital Syphilis at the Colonial War Memorial Hospital, Fiji*  
Presenter: Dr. Stephanie Clark
- 3.4.3.2 *The Association Between Dietary Pattern and Risk of Anaemia among Pregnant Women: Matched Case-Control Study*  
Presenter: Ms. Arishma Prasad
- 3.4.3.3 *Fiji AnteNatal Echocardiographic Screening for RHD by Non-Expert Health Professionals*  
Presenter: Dr. Jimaima Kailawadoko

## **3.5 Oral & Auditory Health**

### **3.5.1 Session One, 05/09/2023 AM**

Session Chair: Dr. William May

#### **3.5.1.1 *The Effectiveness of Primary Ear and Hearing Care Training in Fiji***

Presenter: Dr. Oh Chunghyeon

#### **3.5.1.2 *Revolutionizing Access, Transforming Outcomes: Remote Orthodontic Care in the Pacific Islands***

Presenter: Dr. Hemanth Tumkur Lakshmikantha

### **3.5.2 Session Two, 05/09/2023 PM**

Session Chair: Dr. Suneil Nath

#### **3.5.2.1 *Esophageal Cancer Palliation in the Solomon Islands***

Presenter: Dr. Denton Aota

#### **3.5.2.2 *Burden of Midface Injuries in Fiji***

Presenter: Dr. Moape Naleba

## **3.6 Medical Education**

### **3.6.1 Session One, 05/09/2023 AM**

Session Chair: Dr. William May

#### **3.6.1.1 *Experiences of Third Year Student Nurses during Rural Clinical Practice: A Qualitative Study***

Presenter: Ms. Samsun Nisha Ayub

#### **3.6.1.2 *Challenges Faced by First-Year Nursing Students for Their Online Learning during the COVID-19 Period***

Presenter: Mr. Dharmendra Naidu

Full summaries of oral presentations and ensuing discussions can be found in **Appendix C**.

## 4.0 POSTER PRESENTATIONS LIST

A total of twenty-six poster presentations were delivered covering a range of topics related to non-communicable diseases, communicable diseases, health policy and systems, sexual and reproductive health, maternal and child health, medical education and oral and auditory health. The title, presenting author and institution for these presentations are listed below in order of presentation:

1. Physical Activity, its Barriers, and Glycaemic Control among Diabetic Patients attending Samabula Health Center, Suva, Fiji  
***Dr. Elizabeth Munsanda Mundia, Fiji National University***
2. Impact of COVID-19 lockdown on glycaemic control among Type 2 Diabetes Mellitus patients in Fiji  
***Ms. Natasha Sheron Lata, Fiji National University***
3. Fiji Foodswitch Nutrient Data Comparison  
***Ms. Aliyah Palu, The George Institute for Global Health Australia***
4. A qualitative exploration of food choice motives of urban indigenous food gatekeepers in Fiji: Implications for the use of The Food Choice Questionnaire  
***Ms. Shazna M Buksh, The University of the South Pacific***
5. Perceptions of Hypertensive Patients in Special Outpatient Department at Sigatoka Hospital, Fiji (2021)  
***Dr. Mohammed Amos Zibrán, Ministry of Health and Medical Services, Fiji***
6. Perception of Health Professionals and End-Stage of Renal Disease Patients Regarding the Health Services in the Dialysis Unit in Nauru  
***Ms. Vae Keppa, Ministry of Health, Nauru***
7. CKD Management, Perception Of Patients And Health Care Workers In The FSM: A Qualitative Study  
***Ms. Marcia T. Kephás, Fiji National University***
8. Determinants of food choices and physical activity among secondary school adolescents: a qualitative study  
***Mrs. Lilymay Roqica, Fiji National University***
9. Health seeking behavior among diabetic patients at Naoero diabetic wellness center, republic of Nauru: a qualitative study  
***Ms. Christal Teabuge, Naoero Public Health***
10. Patients' Perception of Factors Influencing Noncompliance with Medication among Cardiac Patients in Fiji: A Qualitative Study  
***Dr. Avnit Kumar, Ministry of Health and Medical Services, Fiji***

11. Hepatitis B in Kwajalein Atoll, RMI  
**Dr. Aneley Getahun, Ministry of Health, RMI**
12. Thinking outside the box: A story of Flu virus, acetylation and the Pacific  
**Ms. Iva Vakalalabure, University of Otago**
13. Trans-National Spread of carbapenem-resistant *Acinetobacter baumannii* in Oceania  
**Mr. Sakiusa Baleivanualala, University of Otago & Fiji National University**
14. Population-based Age-stratified Assessment of SARS-COV-2 Seropositivity in Fiji (PASS Fiji) 2022-2024: Overview of the project  
**Mr. Isireli Koroituku, Fiji Institute of Pacific Health Research, CMNHS, FNU**
15. Nurses Voices: - Factors Affecting Qualifications Upgrading  
- A Qualitative Study of I-Taukei Nurses in Suva  
**Ms. Aliti Baleisawana, Fiji National University**
16. The Lived Experiences of Fijian Male Student Nurses - School of Nursing  
- Fiji National University: A Mixed Method Study  
**Mr. Osea Masilaca, Fiji National University**
17. The impact of Covid-19 crises on Emergency Nurses in a Tertiary Hospital in Fiji  
**Ms. Keshni Kaleshni Naidu, Fiji National University**
18. Evaluation of GeneXpert Capacity in the MOHMS Diagnostic Laboratories in Fiji-Post COVID-19 Pandemic: 2022  
**Mr. Isireli Koroituku, Fiji Institute of Pacific Health Research, CMNHS, FNU**
19. *Providing practical solutions to ensure effective distribution and location monitoring of respiratory equipment*  
**Dr. Fiona Langridge, Cure Kids Fiji & The University of Auckland**
20. *Fiji Oxygen Project - Situational analysis preliminary results*  
**Ms. Shiva Anjini Singh, Cure Kids Fiji**
21. *Land Use Management and Health - Preliminary findings from a qualitative study*  
**Ms. Vilisi Naivalulevu, Fiji Insitute of Pacific Health Research, CMNHS, FNU**
22. *Integrating echo screening into the school health nurse visits in primary schools in Fiji Islands*  
**Ms. Jessica Paka, Cure Kids Fiji**
23. *Cervical cancer screening in the Pacific Island countries: an overview of current management for therapy*  
**Mr. Shamal Chand & Mr. Atlesh Nand Sudhakar, Fiji National University**
24. *Respiratory illness outpatient presentations for people aged  $\geq 5$  yrs in Fiji from 2013 to 2020*  
**Dr. Sainimere Boladuadua, University of Auckland**
25. *Job satisfaction amongst Dental Health Professionals (DHPs) providing dental prosthetic services in Fiji – A Qualitative Study*  
**Ms. Samantha Kumar, Fiji National University**
26. *Challenges in diagnosis of Oral Cancers in Fiji*  
**Dr. Monesha Singh, Ministry of Health & Medical Services, Fiji**

## 5.0 LIST OF AWARDS & PRIZES

AWARD TITLE	AWARDEE	TITLE OF PRESENTATION
Best Poster on Non-Communicable Diseases	Elizabeth Mundia	Physical Activity, its Barriers, and Glycaemic Control among Diabetic Patients attending Samabula Health Center, Suva, Fiji
Best Poster on Communicable Diseases	Iva Vakalalabure	Thinking outside the box: A story of Flu virus, acetylation and the Pacific
Best Poster on RMNACH	Ma'ata Kisina	Evaluation of family planning services in Ma'ufanga and Kolofo'ou Health Clinic, Nukualofa, Tonga
Best Poster on Health Policy & Systems	Shiva Anjini Singh	Fiji Oxygen Project - Situational analysis preliminary results
Best Poster on Oral Health	Samantha Kumar	Job satisfaction amongst Dental Health Professionals (DHPs) providing dental prosthetic services in Fiji – A Qualitative Study
Best Oral presentation on Non-Communicable Diseases by a student	Sumantla Varman	Feasibility and impact of healthy eating and physical activity promoting program at Australian children's museum
Best Oral presentation on Communicable Diseases by a student	Thomas Russell	Treating Hepatitis B Where WHO Guidelines Can Not Be Met
Best Oral presentation on Health policy/Health Systems by a student	Ashvini Krishna	Clinical Practice Guidelines: their Utility, Dissemination and Monitoring at CWMH- a mixed methods study



AWARD TITLE	AWARDEE	TITLE OF PRESENTATION
Best Oral presentation on Non-communicable Diseases by an Early Career Researcher	Shofeen Begum	Physical activity among T2DM patients: Prevalence, barriers, facilitators, and clinical correlates - A descriptive cross-sectional design
Best Oral presentation on Communicable Diseases by an Early Career Researcher	Stallone Kohia	Endoscopic profiles and Helicobacter pylori infection in Solomon Islands: A four-year retrospective study
Best Oral presentation on Health policy/Health systems by an Early Career Researcher	Silina Motofaga	Critical Care Capacity in PICTs: Building on challenges and opportunities from COVID-19

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# 7.0 APPENDICES

## APPENDIX A: Summary of Keynote Presentations

### 1.1 Bridging the Gaps: Pacific Health Evidence to inform Pacific Health Decisions, Professor Mahomed Patel

*Professor Mahomed Patel is an Emeritus Professor at the Australian National University and an Adjunct Professor at Fiji National University*



Professor Patel described the gaps between research, policy, and implementation; disparities between Western knowledge and indigenous knowledge systems; and the imperative to move towards knowledge synergies. The overarching theme of this keynote was the need for Pacific evidence to play a more prominent role in informing health decisions in the Pacific region.

Professor Patel highlighted the suppression of Pacific evidence for Pacific decisions, emphasising the importance of overcoming barriers in the translation of research into effective policy and implementation. The “Vanua” framework, encapsulating the interconnectedness of people to their land, religions, and culture, was introduced as a key concept shaping health decisions in the Pacific. The term “policy” was expanded beyond government actions to encompass a comprehensive plan of action, standard operating procedures, strategic plans, and clinical practice guidelines.

Professor Patel introduced a bridge metaphor with six pillars representing stages in the process of effective evidence-based public health intervention: problem definition, evidence, recommendations/options, policy decision, implementation, and monitoring/evaluation. He highlighted that the implementation phase is often overlooked, and potential pitfalls were outlined for each stage, including the risk of turning research into a “knowledge graveyard” or an “archive.” Appropriate criteria for judgement in a Pacific context was then discussed, with a contrast made between biomedical and constructivist approaches. Professor Patel described Goddard’s model, emphasising the interaction between value, rules, and knowledge in policy decisions. Challenges to the universalism and disinterestedness of positivist science were also discussed, advocating for a Value, Rules, and Knowledge (VRK) approach that recognises the constructed nature of scientific knowledge.

The 1978 Alma Ata declaration and its relevance to Pacific values was explored, emphasising the focus on individuals, families, society, and the environment, and aligning with values of equity, social justice, and solidarity. Conflicts were acknowledged, particularly with the individualism inherent in Western methods. Historical examples, such as the implementation of Alma Ata elements in Fiji pre-1978 and subsequent declines due to externally imposed policies without due attention to local evidence, underscored the importance of context-specific decision-making.

Professor Patel concluded with a call to shift prominence from the Western knowledge system to the indigenous knowledge system in the Pacific. Recognising the need for a more inclusive approach that incorporates indigenous values and context, Professor Patel advocated for a transition towards a health decision-making paradigm that genuinely reflects Pacific realities and aligns with the “Vanua” framework.

## **1.2 Addressing non-communicable diseases in the Pacific: A Health Promotion Approach, Dr. Gade Waqa**

*Head of the Pacific Research Centre for the Prevention of Obesity and Non-Communicable Diseases (C-POND), a WHO Collaborating Centre for Obesity Prevention & Management within the Fiji Institute of Pacific Health Research*



Dr. Waqa delivered a stark assessment of the significant burden faced by Fiji and the broader Pacific region. The impact of non-communicable diseases (NCDs) in the Pacific is among the most pronounced globally. Dr. Waqa gave a call to action, outlining strategies to mitigate the impact and offering a typology of primary health care to address the challenges.

To tackle the Pacific NCD crisis head-on, a multifaceted approach is required. First Dr. Waqa discussed imposing taxes on sugary drinks, coupled with utilising the generated revenue for health promotion. Recognizing the link between high sugar intake and NCDs, this approach not only aims to discourage unhealthy behaviours, but also allocates funds to proactive health promotion initiatives.

The need for strengthened multi-sectoral leadership and governance at the national level was highlighted as another critical pillar in the fight against NCDs. Acknowledging that NCDs are complex issues requiring comprehensive solutions beyond the healthcare sector, Dr. Waqa stressed the importance of collaboration between various sectors. This collaboration extends to governance structures, ensuring a cohesive and coordinated effort to address the multifaceted challenges posed by NCDs.

The concept of a “policy window” was introduced as a moment in time where understanding of the problem aligns with the availability of feasible solutions and political will. Dr. Waqa stressed that the policy window for addressing NCDs in the Pacific is currently open, urging swift and decisive action. This alignment provides a unique opportunity for impactful interventions that can yield positive health outcomes.

Dr. Waqa also described the typology of primary health care that can serve as a framework for curbing NCDs in the Pacific. This framework includes community healthcare workers as the front line in health promotion and education; primary health care facilities and networks as essential components for early detection and intervention; and hospital-based primary health care for managing advanced cases and providing specialised care.

Dr. Waqa’s talk was a compelling call to action, advocating for a “Health Promotion Approach ” to address the NCD crisis. This approach prioritises proactive measures to facilitate behaviour change, recognising that prevention is a key component in mitigating the impact of NCDs.

### 1.3 Climate Change and Health, Professor Karin Leder

*Professor Leder is Co-Lead of the RISE Program and Head of Infectious Disease Epidemiology at Monash University*



Professor Leder addressed the intricate and far-reaching impacts of climate change on public health, capturing both direct and indirect consequences across various dimensions. The talk began by emphasising that climate change effects can manifest both acutely and chronically, impacting health in multifaceted ways.

Extreme weather events, synonymous with climate change, were identified as significant contributors to increased morbidity and mortality, affecting populations through both hot and cold conditions. A striking revelation was that cold weather leads to 15-20 times more temperature-attributable deaths compared to heat. The magnitude, speed, and duration of temperature changes were emphasised as crucial factors predicting the health impact of extreme weather events.

Additionally, severe weather events and natural disasters, which are becoming more frequent with climate change, were identified as having both physical and mental health impacts. Beyond the immediate physical risks, the mental health toll resulting from the trauma of such events was acknowledged.

Professor Leder then discussed the environmental degradation associated with climate change, outlining a chain of effects. Decreased crop yields, a consequence of environmental changes, were highlighted as a potential pathway leading to malnutrition. Additionally, shifts in climate were shown to impact water quality, establishing a direct link between climate change and the spread of communicable diseases.

Air pollution was raised as another health concern exacerbated by climate change. Professor Leder underscored the association between climate change and respiratory diseases, including asthma and allergies, emphasising the need for a comprehensive understanding of how environmental changes affect public health.

The changing dynamics of vector ecology due to climate change, intensifying the burden of communicable diseases, was also explored. Notably, climate change impacts on pathogens, altering their growth, survival, transmission, and virulence, were discussed. The broader impact on ecosystems was elucidated, revealing changes in the risk of zoonotic infections. The alterations in vector characteristics, encompassing geographic locations, distribution, and breeding behaviour, were emphasised as critical factors shaping the spread of diseases. An example given was dengue fever, where increased rainfall and temperature create conducive environments for the mosquito carrier, leading to an expansion of regions affected by the disease.

Climatic stressors often have multiple interrelated and compounding impacts on health, posing complex challenges for health systems worldwide. From the direct impacts of extreme weather events to the indirect consequences of environmental degradation and altered vector ecology, Professor Leder underscored the urgency of understanding and addressing these complex dynamics.



## APPENDIX B: Summary of Panel Discussions

### 2.1 Bridging the Research-Policy-Implementation Gaps in Universal Health Coverage & Primary Health Care in the Pacific

*Session Chair: Dr. Donald Wilson*

*Panel: Hon. Dr. Ratu Antonio Lalabalavu, Professor Mahomed Patel, Dr. Lepani Waqatakirewa, Mr. Sunia Soakai*

To begin this panel discussion, the Hon. Dr. Antonio Lalabalavu, Fiji's Minister for Health, emphasised the government's commitment to incorporating knowledge produced by Fijian institutions and those present into the decision-making processes.

Mr. Soakai was questioned about the vision for primary health care (PHC) in the Pacific and highlighted the 'Healthy Islands Vision' as a forward-thinking framework. Barriers to effective PHC were discussed, including financing challenges, the impact of non-communicable diseases (NCDs), and the overwhelming of health systems during emergencies, such as the current COVID-19 pandemic.

A question was asked of the panel about the potential dominance of Western knowledge systems in Fiji's health system and the need for synergies with traditional knowledge systems. Dr. Waqatakirewa shed light on the coexistence of the traditional Vanua structure and the Western health model. Opportunities for synergy were identified, emphasising the need to build on traditional knowledge while integrating best Western practices. Initiatives, such as involving village health workers and incorporating traditional practices into health interventions, were discussed. The life expectancy index illustrated the historical impact of Western science on Fiji's health system, showing significant improvements until 1970, but a flattening in recent years.

The discussion then shifted to the role of scepticism in science, particularly questioning science brought in by outsiders. Professor Patel stressed the importance of scepticism and the need for engagement from all stakeholders throughout the research process.



Stemming from an audience question, the interface between primary health care and public health was explored, highlighting their interdependence and the challenge of striking the correct balance. The audience raised questions about protecting Pacific priorities during project design, emphasising the importance of countries having clear strategic plans. The need for critical thinking beyond a purely scientific framework was addressed, advocating for synergy between scientific and traditional knowledge.

The future of the private sector merging with the public sector for the benefit of public health and primary health care research was also discussed. The synergy was said to be dictated by priorities, with the government viewing the private sector as drivers of the economy. The question of the most effective model for collaboration between the private and public sectors in Fiji was raised, pointing to the need for careful consideration of the Pacific context.

Ultimately, the panel discussion offered a comprehensive exploration of the challenges and opportunities in achieving Universal Health Coverage and advancing Primary Health Care in the Pacific. From questioning the dominance of Western knowledge to promoting synergies with traditional knowledge, the discussion emphasised the importance of context-specific approaches and collaboration among stakeholders for meaningful and sustainable health outcomes in the region.

## **2.2 Bridging the Research-Policy-Implementation Gaps in Non-Communicable Diseases in the Pacific**

*Session Chair: Dr. Gade Waqa*

*Panel: Professor Colin Bell, Dr. Devina Nand, Dr. Pritika Narayan, Dr. Oripa Waqa*

The panel discussed a range of challenges and opportunities in addressing the burden of these diseases in the region. Key barriers identified included systemic flaws in the existing healthcare structure, marked by workforce shortages both general and specific across the Pacific. To address this, there was a call to recruit and retain healthcare workers (HCWs) to enhance continuity and build capacity within the healthcare system.

Access to medications emerged as a significant challenge, particularly for small island states lacking the negotiating power to secure favourable prices. The resulting high medication costs limit the accessibility of essential drugs, contributing to the burden of NCDs. The discussion underscored the need for improved health promotion strategies and the integration of cultural and traditional beliefs into data-driven programs for more effective outcomes.

Women's health was highlighted as a critical factor, with women playing central roles in childcare, cooking, and household management and influencing health behaviours within the family. The importance of including women throughout the research process was emphasised, ensuring their perspectives and experiences are considered. The need for a holistic approach that considers cultural context and combines traditional beliefs with empirical data was stressed as essential in crafting effective health programs.



Concerns were raised about data pooling inhibiting the identification of at-risk groups. To address this, there was a call for research to be driven by Pacific peoples and local leaders, emphasising the importance of decolonisation in the research process. The panel stressed the necessity of synergy between practitioners and researchers, emphasising collaboration to bridge gaps in understanding and implementation.

The discussion highlighted the critical role of asking the right questions in research, suggesting that this is even more crucial than the methodology employed. Researchers were encouraged to prioritise questions that resonate with the Pacific context, acknowledging the unique challenges and opportunities in the region. Decolonisation, not just in healthcare structures but also in research frameworks, was seen as fundamental to addressing the specific needs of Pacific communities.

The impact of Western greed on Low- and Middle-Income Countries (LMICs), including those in the Pacific, was a prominent theme. The discussion emphasised the need to recognize the influence of economic dynamics and global power structures that exacerbate the burden of NCDs in LMICs. This acknowledgement urged a re-evaluation of international collaborations and interventions to ensure they are equitable and address the root causes of NCDs.

Additionally, the importance of tailoring messaging to different populations was underscored. Recognising the diversity of Pacific communities, the panel stressed that one-size-fits-all approaches are ineffective. Instead, interventions should be culturally sensitive, acknowledging the unique contexts and needs of different populations. This acknowledgment called for a nuanced and community-specific approach to health communication and intervention strategies.

The need for healthcare system improvements, medication accessibility, cultural sensitivity, and the recognition of global economic influences was emphasised throughout this discussion. The crucial role of collaboration, decolonization, and tailored messaging for diverse populations emerged as key principles in developing effective strategies to combat the NCD burden in the Pacific.



## 2.3 Bridging the Research-Policy-Implementation Gaps in Reproductive, Maternal, Child, Adolescent Health & HIV in the Pacific

*Session Chair: Dr. Kesaia Nawaqaliva*

*Panel: Dr. Jason Mitchell, Dr. Christopher Fox, Dr. Rachel Devi, Dr Litia Narube*

The panel discussed several crucial issues in the Pacific region including the presence of a generalised HIV epidemic, specifically in Fiji, which has the second-highest rates of HIV in the region. This is particularly alarming as Fiji serves as a gateway to the entire region. The response to this epidemic has been through regional programs rather than country-specific initiatives, and the success of these programs has been hampered by funding withdrawals.

Testing was identified as a crucial component of HIV preventative strategies. Additionally, in Fiji, a contributing factor to the HIV epidemic is drug use, an issue that is not openly discussed, and lacks sufficient data for informed decision-making. It was noted that drug use was only recently recognised as an issue, and there is still a lack of evidence and data on this topic. During the discussion it was stressed that addressing this knowledge gap is essential to combat the HIV pandemic effectively. The need to identify who to reach out to and how to reach out effectively was also emphasised.

The discussion then shifted into the impact of masculinity on male reproductive health. Panellists emphasised the diverse nature of masculinities, stating that there isn't a singular concept of "masculinity." The conversation urged a shift from researching barriers to focusing on enablers, suggesting that understanding and promoting positive aspects of masculinity could be more effective.

Existing Reproductive, Maternal, Child, and Adolescent Health policy was discussed, with a notable gap identified as sexual health. Emphasis was placed on the need for continual monitoring, adjustments, learning, and evaluation of policy.



The audience raised questions about community initiatives and the incorporation of traditional cultural values into sexual health in Fiji. It was noted that applying Western terms and methods is not appropriate in Fiji and that ending the tabu (taboo) around discussing sexual health in the Pacific is crucial for the people to define their sexual health within their own cultural context.

This panel discussion underscored the urgency of addressing the generalised HIV epidemic in the Pacific, particularly in Fiji, and raised concerns about gaps in data and responses to emerging issues like drug use. It called for a more nuanced understanding of masculinity and emphasised the importance of incorporating cultural values into sexual health initiatives. The dialogue highlighted the need for comprehensive, culturally sensitive strategies to tackle sexual and reproductive health challenges in the Pacific region.

## **2.4 Bridging the Research-Policy-Implementation Gaps in Climate Change & Health in the Pacific**

*Session Chair: Dr. Timaima Tuiketeki*

*Panel: Professor Karin Leder, Dr. Amelia Turagabeci, Ms. Ateca Kama*

During this discussion, the panel highlighted the intricate challenges posed by this global issue. Climate change was characterised as a complex and multifaceted problem, demanding recognition as a public health emergency. The suggested courses of action included enhancing sustainability in healthcare, bolstering health infrastructure, and developing capacity and training for climate-related emergencies, with a specific emphasis on identifying vulnerable populations.

An emphasis was placed on traditional knowledge as a vital perspective to be incorporated into government initiatives, underlining the importance of integrating the voices of communities with historical knowledge of their environments. A notable aspect of the discussion was the recognition of traditional indigenous knowledge as a valuable resource.

The ongoing research focus on traditional knowledge was underscored, suggesting that the Western world can learn from indigenous communities in addressing the challenges of climate change. Additionally, the panel and the Minister for Health both highlighted the need for Pacific Island Countries and Territories to advocate for fair treatment from larger countries responsible for the majority of emissions. The call for a holistic governmental approach underscored the need for a concerted effort across sectors to effectively address the ramifications of climate change on public health.

Regarding research investments, the panel acknowledged the difficulty in quantifying the specific proportion of resources that should be allocated to combating climate change but stressed the importance of substantial funding to sustain a multi-disciplinary approach. Researchers were encouraged to focus on regional collaboration, emphasising the interconnectedness of climate change and health policies across borders.



The issue of food security in the context of climate change was discussed, and recommendations included promoting sustainable farming practices, fisheries management, and the cultivation of climate-resilient agriculture such as drought-resistant crops. The importance of reliable data for informed policy decisions was highlighted, with a specific mention of the necessity of comprehensive environmental impact assessments.

Monetary cost and holistic considerations were also raised, with the panel noting the need to move beyond immediate financial implications and consider the long-term sustainability of policies. There was also scrutiny of the actions of developed countries, with a call for them to take more significant steps in reducing their emissions. The role of research scientists in driving meaningful change was passionately highlighted, underscoring the need for collaborative efforts between scientists and policymakers.

Ultimately, this discussion emphasised the urgent need for climate action including the need to incorporate traditional knowledge, promote sustainable practices, and invest substantially in research to combat this public health emergency. The call for collaboration and the need for developed countries to take greater responsibility for their emissions formed key takeaways from the discussion.

## **2.5 Bridging the Research-Policy-Implementation Gaps in Communicable & Re-Emerging Infectious Diseases in the Pacific**

*Session Chair: Dr. Ana Ratu*

*Panel: Professor Philip Hill, Professor James Ussher, Dr. Aalisha Sahukhan,  
Dr. Van Main CAO-Lormeau*

This discussion drew upon lessons learned from the COVID-19 pandemic while addressing critical issues such as evidence-based policymaking, lab capacity strengthening, antimicrobial resistance, and the importance of context-specific research.

One key takeaway from the COVID-19 pandemic was the ability of small island states, such as those in the Pacific, to control their borders effectively. This underscored the significance of border control measures in mitigating the spread of communicable diseases in geographically isolated regions.

The discussion emphasised the importance of using an evidence base for controlling pandemics and other communicable disease outbreaks. Notably, it was highlighted that viruses may not be well-adapted to humans in the first six months of an outbreak, as observed in the case of the recent COVID-19 pandemic. The panel advocated for proactive investment in optimising public health responses to pre-empt future outbreaks, thereby avoiding the need for widespread lockdowns. The necessity of a well-prepared public health infrastructure emerged as a crucial element in effectively managing and controlling communicable diseases.

Lab capacity strengthening was also identified as a key lesson for future pandemics. The emphasis was placed on the early establishment and continuous improvement of testing capacity. Ensuring that laboratories are well-equipped and ready to respond swiftly to emerging threats is essential for effective disease containment.



The panel moved on to discuss the growing problem of antimicrobial resistance, recognising it as a true 'one health' issue, originating in developed nations but with global implications. The discussion highlighted the interconnectedness of health, both human and animal, and the need for a multidisciplinary approach that includes the animal sector. Infection prevention and control, encompassing good hospital cleaning practices and hand hygiene, were identified as key components of the response to antimicrobial resistance.

A question was raised related to why Pacific Island Countries and Territories (PICTs) should research diseases already studied in larger developed countries. The response emphasised the need to account for the unique context of PICTs, recognizing that solutions found in larger nations may not be directly applicable. Research in PICTs must consider the local context to find effective and culturally appropriate answers to communicable disease challenges.

This discussion also highlighted the importance of acknowledging and utilising Pacific strengths in the regional response. There was a call to develop strategies with local communities rather than for them, recognising the value of community involvement and indigenous knowledge in designing effective public health interventions.

The panel discussion provided a comprehensive overview of key lessons learned from the COVID-19 pandemic and underscored the importance of continued development within the Pacific in terms of preparedness and responses to communicable diseases, as well as continuing Pacific lead research acknowledging the unique environmental and cultural contexts of PICTs.

## APPENDIX C: Summary of Oral Presentations

### 4.1 Non-Communicable Diseases

#### 4.1.1 Session One, 04/09/2023 AM

*Session Chairs: Dr. Anne-Marie Thow & Dr. Cath Conn*

##### 4.1.1.1 *Opportunities and perceptions to promoting physical activity and reducing screen time in the Pacific Islands*

Presenter, Ms. Sarah T. Ryan, discussed the pressing issue of non-communicable diseases in the Pacific Islands. The study aimed to explore opportunities for promoting healthy movement behaviours and assess the knowledge and attitudes of Pacific Islands Countries and Territories (PICT) stakeholders towards physical activity (PA) and screen time (ST) guidelines.

The study identified various challenges across different levels of the Social Ecological Model, from limited awareness of guidelines at the individual level to policy rigidity in school curricula. The presenter highlighted the need for a social marketing campaign to promote healthy levels of PA and ST among children in PICTs, emphasising alignment with the WHO Global Action Plan for Physical Activity (GAPPA).

Questions from the audience sought clarification on the main objective of the study, which was to gauge stakeholders' understanding of PA and ST guidelines and to identify barriers to their comprehension.

##### 4.1.1.2 *HCPF: Intervention to improve Nutrition and Physical Activity of Primary School children in Suva*

Dr. Pragya Singh addressed the alarming rise in childhood obesity, particularly in Fiji, and introduced an intervention program aimed at improving the nutrition and physical activity of primary school children. The study employed a pre-post cohort design, implementing sessions on healthy food consumption and physical activity.

Results indicated a significant improvement in knowledge, attitudes, and practices related to healthy diet consumption and physical activity among the participating children. However, the study faced challenges related to limited teacher participation and slow responses from the Ministry of Health.

##### 4.1.1.3 *Progress on food taxation and subsidies in Tonga and the Pacific*

Dr. Viliami Puloka highlighted the non-communicable disease crisis in the Pacific and the need for effective measures to combat dietary risk factors. The study systematically reviewed food taxation policies in 22 Pacific jurisdictions. The results revealed that a quarter of the jurisdictions had introduced excise taxes on food, with a focus on processed foods, sugar, and salt. Tonga was recognised for substantial progress in taxing unhealthy food and beverages.

Dr. Puloka concluded that well-designed food and beverage taxes are crucial for NCD prevention in the Pacific.

#### **4.1.1.4** *Physical activity among T2DM patients: Prevalence, barriers, facilitators, and clinical correlates - A descriptive cross-sectional design*

Ms. Shofeen Fahra Naz Begum discussed the high prevalence of physical inactivity among Type 2 Diabetes Mellitus (T2DM) patients in Suva, Fiji. The study aimed to understand the factors influencing physical activity levels and the barriers faced by T2DM patients.

Results showed that physically active participants had better clinical outcomes. Identified barriers included personal and external factors, highlighting the need for multi-sectoral approaches to address these issues.

The audience commended the research and inquired about extending the study to other sectors and divisions. It was suggested that the findings should be presented to a working group focusing on cardiovascular assessment guidelines and with involvement of physiotherapists in educating participants.

### **4.1.2 Session Two, 04/09/2023 PM**

***Session Chairs: Dr. Pragya Singh & Ms. Ateca Kama***

#### **4.1.2.1** *Diabetes Cam: An objective methodology to study diabetes self-management*

Ms. Keresi Rokorua Bako introduced the “Diabetes Cam” study, which employed a unique methodology to investigate diabetes self-management. The methodology involved attaching a camera to select diabetic individuals to capture their daily lives, focusing on their self-management practices. The study utilised photo elicitation and questionnaires to collect data.

Results of the study were not presented in this session, but the methodology involved participants reviewing and deleting images as desired before returning the camera for analysis. This approach aimed to provide insights into diabetes self-management, particularly in terms of food choices, physical activity, medication use, and healthcare service utilisation.

Questions were raised about participant compliance with wearing the camera and whether the awareness of being recorded influenced their behaviour. Ms. Bako explained the study protocol, emphasising that participants were encouraged to act naturally and that the results paper would reveal more about the quality of data captured.

#### **4.1.2.2** *Healthy and sustainable food systems for the Pacific: Policy review to community action*

Dr. Cath Conn's presentation centred on the exploration of healthy and sustainable food systems in the Pacific. The study highlighted the need for a global, multisectoral approach to address the non-communicable disease "wicked problem." Dr. Conn emphasised the importance of considering three key domains that impact diets in the Pacific: food production, climate change and sustainability, and trade, retailing, and marketing.

The presentation underlined the significance of involving the private sector and the community in tackling the NCD issue. The concept of "food deserts," "food oases," and "food swamps" was introduced, along with the importance of community approaches such as "Whanau Food Havens."

During the Q&A session, questions were raised about the potential for expanding the study into other Pacific Island Countries and the interaction between business and health in the context of the private sector. Dr. Conn encouraged multi-sector collaboration and underlined the need for improved communication. Additionally, the discussion touched on the challenges posed by changing climates and strategies such as investing in hydroponics.

#### **4.1.2.3** *Challenges and enablers to eating healthily: a Photovoice study with adolescents attending secondary schools in Fiji*

Ms. Viola Lesi presented a study employing the "Photovoice" method, which values the unique experiences of young people. The research focused on adolescents attending secondary schools in Fiji and aimed to assess the factors influencing their ability to eat healthily.

The methodology involved participatory action research, with 12 students per school, ensuring equal gender distribution among participants. Students were given the task of taking pictures in response to two key questions related to healthy eating. Preliminary findings were presented, emphasising the influence of peers and social factors on food choices.

Queries were raised about the two-step analysis process for the photographs and the role of social media in the discussions. Ms. Lesi explained the reasoning behind selecting one picture from a set of three and confirmed that social media did come up in discussions. The presence of "food traps" in schools was also discussed, with some schools offering both healthy food options and "food traps."

### **4.1.3 Session Three, 05/09/2023 AM** ***Session Chairs: Professor Colin Bell & Dr. Silina Motofaga***

#### **4.1.3.1** *Investigating Acute Coronary Syndrome in Fijian Population living in Aotearoa-NZ*

Dr. Pritika Narayan's presentation described the investigation of acute coronary syndrome (ACS) in the Fijian population residing in Aotearoa-New Zealand. This research aimed to identify trends in ACS-related diagnoses, procedures, and outcomes among individuals with Fijian ethnicity codes. The study sought to understand the impact of age, sex differences, and mortality rates.

The methodology involved the analysis of hospitalisation data sets covering nearly three decades. The analysis would explore ACS-related diagnoses and mortality rates across different ethnic groups, including individuals with single or multiple ethnic codes. This research highlighted the urgent need to address health inequity and the disproportionate burden of premature heart disease among the Fijian population in NZ.

#### **4.1.3.2** *Tongan New Zealanders' views on the National Bowel Cancer Screening programme*

Dr. Viliami Puloka presented a study focused on the experiences of Tongan New Zealanders participating in the National Bowel Cancer Screening Programme (NBSP). The research aimed to understand their perspectives on the program and how to make it more effective for the Tongan community.

The methodology involved talanoa focus groups with Tongan participants who had experienced the NBSP and interviews with Pacific experts working in the program. Research participants emphasised the need for a culturally appropriate and empowering program that aligns with Tongan values and ways of working, including the use of the Tongan language to empower Tongans to take control of their own health.

#### **4.1.3.3** *Encouraging healthy eating and physical activity through experiential learning in children's museums*

Mrs. Sumantla Varma presented a study that explored the feasibility, acceptability, and perceived impact of an experiential learning (EL) health-promoting program in a children's museum setting. The program aimed to encourage healthy eating (HE) and physical activity (PA) in children through hands-on activities.

The study involved focus group discussions with caregivers and museum educators. The program was found to be feasible, acceptable, and high in fidelity, with positive impacts on children's knowledge and attitudes toward HE and PA. The study emphasised the significance of stakeholder engagement and the incorporation of enjoyable activities to promote healthy habits in children.



#### **4.1.3.4** *Reversing T2DM with Low Carb Diet (LCD) and an 8-10hr restricted eating time*

Dr. Zen Low's presentation focused on a groundbreaking approach to reversing Type 2 Diabetes Mellitus through a low carb diet and time-restricted eating. His research involved offering this alternative therapy to four clients with varying durations of T2DM and different pharmacological treatments.

All four clients eventually achieved their targeted fasting blood sugar levels without the need for antidiabetic medications. The study provided evidence that T2DM is reversible with a low carb diet and an 8-10-hour eating window. Dr. Low explained the practical aspects of the low carb diet, including meal plans and timing.

#### **4.1.4** **Session Four, 05/09/2023 PM** **Session Chair: Dr. Pritika Narayan**

All presenters in this session were part of the Global Alliance for Chronic Diseases (GACD) SCALE-UP cluster funding awarded to the George Institute in partnership with the Fiji National University, Deakin University, and the University of Sydney. This session, titled "Scaling-up Food Policy Interventions to reduce Non-Communicable Diseases in the Pacific Islands" included seven speakers delivering a continuous unified presentation, followed by a group question and answer session.

Dr. Gade Waqa began by presenting the urgent need for evidence-based policy interventions to combat the non-communicable disease crisis in the Pacific Islands, particularly focusing on salt and sugar consumption. Her presentation discussed the importance of community engagement, multi-stakeholder approaches, ethics approvals, traditional protocols, and disseminating results. Dr. Waqa concluded by highlighting the necessity of increasing education and awareness campaigns to inform consumers about the health risks of excessive salt and sugar intake.

Dr. Anne-Marie Thow followed with a presentation on estimating the health and economic impact of different sugar-sweetened beverages (SSB) tax scenarios in Fiji. This study involved two key components: modelling the impact of SSB taxes on obesity and NCDs and a policy analysis examining corporate political activity. Results revealed the potential for meaningful reductions in obesity-related diseases with SSB tax scale-ups. Policy analysis emphasised opportunities to strengthen fiscal policies, tighten political action across sectors, and counter food industry influence to promote healthier diets.

Ms. Aliyah Palu presented on assessing the consumption levels and dietary sources of ultra-processed foods (UPFs) in the Central Division of Fiji. Results indicate that UPFs contribute significantly to total energy intake, highlighting the need for interventions to reduce salt, fat, and sugar intake, with a particular focus on UPFs.

Professor Colin Bell then presented research to support taxing unhealthy foods and actions that promote healthy eating in Fiji. This research included consumer and policymaker perspectives. It found that the main barrier to healthy eating was cost, with community and government-supported home gardening being a key facilitator. The study demonstrated strong support for policy actions aimed at promoting healthy eating among consumers and policymakers, irrespective of demographic characteristics.

Dr. Briar McKenzie gave a presentation highlighting the disparity between knowledge and behaviour concerning salt and sugar consumption in the adult population of Fiji. While people recognised the health risks associated with excessive salt and sugar intake, their dietary behaviour did not consistently align with this knowledge. This research emphasises the need for greater stakeholder awareness and policy revisions to provide easier access to healthier, low-salt, and low-sugar food alternatives.

Dr. McKenzie also presented a study estimating salt and sugar intakes and their primary sources among adults in Fiji's Central Division. Results found that salt and sugar intake exceeded World Health Organization recommendations. The main sources of salt and sugar were identified, highlighting the need for interventions and strategies to guide healthier food choices.

In closing, Dr. Waqa stressed the importance of community engagement, multi-stakeholder collaboration, and adherence to traditional protocols. The session discussed the HIC DARM approach (Hear, be Informed, be Convinced, Decide for yourself, Accept change, Reconvince/Reconfirm yourself, Manage your life/choices accordingly).

During the Q&A session, participants and policymakers raised important questions and provided insights into the role of religion in food choices, the impact of political changes, and the feasibility of banning specific food items. Alternative approaches to banning products and improving food product affordability were also discussed.

The session concluded by emphasising the need for evidence-based policies, stakeholder engagement, and multisectoral strategies to address the growing challenge of non-communicable diseases in the Pacific Islands. Comprehensive, community-focused approaches to achieve healthier food choices and reduce NCDs in the region are of critical importance.



## 4.2 Communicable Diseases

### 4.2.1 Session One, 04/09/2023 AM Session chair: Professor Philip Hill

#### 4.2.1.1 *A tuberculosis elimination-focused geospatial approach to optimising access to diagnostic GeneXpert machines in Fiji*

Mr. George Bates presented a geospatial approach to improving tuberculosis (TB) diagnosis using GeneXpert® machines in Fiji. The study aimed to determine the number and strategic locations of GeneXpert machines needed to ensure that over 90% of the Fijian population could access TB tests within a one-hour drive. The study found that with 24 strategically placed machines, over 90% of Fijians could access a GeneXpert machine within one hour, addressing the need for efficient population coverage.

#### 4.2.1.2 *Typhoid fever among health workers linked to community outbreak: whole genome sequencing to complement outbreak investigation*

Dr. Aneley Getahun Strobel discussed an outbreak of typhoid fever among health workers in Fiji. The presentation highlighted the use of whole genome sequencing (WGS) to characterise the outbreak. It was revealed that the typhoid outbreak among health workers was genetically linked to a community outbreak reported earlier, emphasising the importance of food safety and hand hygiene during food preparation for mass consumption.

#### **4.2.1.3** *Clonal Outbreaks of Carbapenem-Resistant Pathogens in Fiji Hospitals: Emergence, Transmission, and Implications for Control*

Mr. Sakiusa Baleivanualala addressed the critical issue of carbapenem-resistant Gram-negative pathogens in Fiji's hospitals. His study analysed the spread of these pathogens within healthcare facilities. It identified specific clonal types of carbapenem-resistant organisms and highlighted the role of nosocomial transmission. The findings stressed the need for improved infection prevention and control measures, antimicrobial stewardship, and surveillance of antimicrobial resistance.

#### **4.2.1.4** *Epidemiology, clinical and public health management of typhoid in the Northern Division, Fiji (2017-2019)*

Dr. Aneley Getahun Strobel presented the epidemiological and clinical features of typhoid in Fiji's Northern Division. The study aimed to provide baseline data for a proposed mass vaccination program. Study findings revealed that typhoid was common among the young, iTaukei population, and males. Complications and fatalities were higher in this division, emphasising the importance of prompt case finding and treatment for improved patient outcomes.

### **4.2.2 Session Two, 04/09/2023 PM**

#### ***Session Chairs: Professor Florian Marks & Professor Hazel Clottier***

#### **4.2.2.1** *Strengthening typhoid surveillance around a mass vaccination campaign in the Northern Division of Fiji*

Mr. Orisi Cabenatabu discussed Fiji's ongoing efforts to bolster typhoid surveillance in conjunction with a mass vaccination campaign in the Northern Division. The focus has been on enhancing both clinical and environmental surveillance. These efforts have yielded positive results, with increased blood culture collection and a reduction in the time required for case investigations. Notably, a significant number of typhoid cases, particularly among adults, were detected. Data supports extended vaccination to include older age groups, which may contribute to a substantial reduction in the typhoid burden in Fiji.

#### **4.2.2.2** *Island-wide environmental surveillance for Salmonella Typhi in a mass vaccination context in Fiji*

In the presentation by Mr. Pranit Kapoor, the establishment of an island-wide environmental surveillance system for Salmonella Typhi in Fiji was highlighted. This initiative complements clinical data and an ongoing mass vaccination campaign. The presentation emphasised the importance of environmental surveillance, especially in mid-endemic and rural areas. Key elements included the selection of sampling sites based on various factors. Preliminary results showed the successful detection of S. typhi DNA, demonstrating the potential value of environmental surveillance in monitoring the impact of vaccination programs.

#### **4.2.2.3** *Measuring the status of immunisation and drivers for vaccination in children with disability, Fiji 2023*

Ms. Unise Vakaloloma presented on assessing vaccination coverage and the drivers behind vaccine uptake among children with disabilities in Fiji. This mixed methods study uses surveys and discussions with healthcare providers and community influencers. Preliminary findings revealed vaccination coverage gaps in children with disabilities offering insights into the social and behavioural factors influencing immunisation. This research aims to inform strategies that can enhance access to equitable immunisation and inclusive healthcare services for children with disabilities in Fiji.

### **4.2.3 Session Three, 05/09/2023 PM**

***Session Chairs: Professor James Ussher & Dr. Lucia Romani***

#### **4.2.3.1** *Social and behavioural risk factors for communicable disease in Fiji*

Dr. Anaseini Ratu presented on the prevalence of social and behavioural risk factors for communicable diseases in rural Fijian watersheds. Findings showed the significance of hygiene practices, water supply, and socioeconomic status, with low-income households being particularly vulnerable to communicable diseases.

Addressing these broader risk factors is imperative for disease control, underscoring the importance of innovative community approaches to promote health and hygiene.

#### **4.2.3.2** *Antimicrobial stewardship awareness, practices and perceptions amongst Farmers, Physicians and Pharmacists in Fiji*

Dr. Royford Magiri's presentation described the awareness, practices, and perceptions of antimicrobial stewardship among farmers, physicians, and pharmacists in Fiji. Findings identified the various barriers and facilitators impacting effective stewardship programs. This emphasises the necessity of healthcare professionals collaborating closely to ensure the success of stewardship initiatives within the community.

#### **4.2.3.3** *Enteric pathogenic load in animals in urban informal settlements*

Mr. Revoni Vamosi presented a study on the transmission of hookworm infections in urban informal settlements in Suva, Fiji. It highlighted the prevalence of *Ancylostoma duodenale* and *Necator americanus* in the environment and emphasised the significance of skin and soil contact in transmission. This research provides a crucial foundation for designing interventions that can better control hookworm infections, with particular emphasis on improving public awareness and hygiene practices.



#### **4.2.3.4** *Treating Hepatitis B Where WHO Guidelines Can Not Be Met*

Dr. Thomas Russell's presentation introduced a novel strategy for treating Hepatitis B in Kiribati, where WHO guidelines cannot be met. The "test, treat, or vaccinate" approach has significantly lowered transmission rates, eliminated the need for costly biochemical testing, and promised substantial public health benefits. This innovative strategy showcases the potential for resource-constrained regions to make substantial progress in combating communicable diseases with practical, context-specific interventions.

#### **4.2.3.5** *Epidemiology of Tuberculosis in Fiji, through an elimination lens: 2014-2021*

Mr. Isireli Koroituku presented a comprehensive review of the epidemiology of Tuberculosis in Fiji, analysing the data through the lens of elimination. Study findings explored shifts in case notification rates, gender disparities, and the specific challenges faced in remote regions. In addition, it was observed that child mortality from TB requires further exploration. The need for improved TB treatment success rates and optimisation of information systems for better disease management and control were emphasised.

#### **4.2.3.6** *A community prevalence study to measure the level of under-detection of COVID-19 on Efate Island, Vanuatu*

Dr. Florita Toa Sitobata's research assessed the under-detection of COVID-19 on Efate Island, Vanuatu, during the early weeks of community transmission. Results indicate that the number of COVID-19 cases was substantially underestimated, emphasising the need for enhanced community awareness, support, and testing. Study findings stress the importance of proactive measures in combating communicable diseases, especially during outbreaks. Effective communication and community engagement are also considered critical.

### **4.2.4** **Session Four, 06/09/2023 AM**

***Session Chairs: Dr. Aneley Getahun & Professor Stephen Howie***

#### **4.2.4.1** *The Application of Fluidigm Approach to Understanding AMR in Informal Settlements*

Antimicrobial resistance (AMR) is a global health concern, with increasing attention on its prevalence in lower and middle-income countries, especially in informal settlements. Research presented by Mr. Autiko Tela focused on how AMR can be transmitted from the environment to humans in these settings. By employing a Fluidigm approach, the study examined AMR in human faeces, animal scats, environmental and reticulated water, and soil samples collected from informal settlements. Findings revealed cross-contamination between humans, animals, and the environment, raising concerns about the potential spread of AMR in these areas. This research underscores the need to address environmental and animal transmission of AMR in LMICs, particularly in informal settlements with dense populations and poor sanitation infrastructure.



#### **4.2.4.2** *Knowledge of Antimicrobial Use and Resistance Organisms from Small-Scale Commercial Poultry Farms in Fiji*

Antimicrobial resistance (AMR) poses a significant public health challenge. In the Pacific Island nation of Fiji, understanding the prevalence of AMR and trends, particularly in livestock, is limited. Ms. Shivani Singh's study examined AMR knowledge among respondents from small-scale commercial poultry farms in Fiji. Findings revealed a lack of awareness about antibiotics and their correct use, with a substantial portion of respondents having never heard of antibiotics. Additionally, the study reported resistance patterns of bacterial isolates to various antibiotics. Results emphasise the critical need to increase awareness, educate farmers, and implement appropriate solutions to combat the emergence of AMR in livestock, which can have detrimental implications for public health.

#### **4.2.4.3** *Dairy Farming and Emerging Antimicrobial Resistance in Fiji*

Dairy farming plays a crucial role in Fiji's economy, providing income, food security, and nutrition. Research presented by Ms. Wati Mocevakaca assessed the situation of dairy farming in Fiji, where most farms produce less than 4.5 litres of milk per cow per day. The study also examined antibiotic sensitivity patterns in bacteria isolated from calf diarrhoea, with a focus on resistance to specific antibiotics. Results highlighted the presence of resistant bacteria and the pressing need for intervention strategies to boost milk production and curb the emergence of antimicrobial resistance. This research calls for improved practices and policies to ensure the sustainability of dairy farming and public health in Fiji.

#### **4.2.4.4** *Endoscopic Profiles and Helicobacter pylori Infection in Solomon Islands: A Four-Year Retrospective Study*

*Helicobacter pylori* (*H. pylori*) is a treatable bacterial pathogen that affects a substantial portion of the global population, potentially leading to severe complications, including gastric cancer. Dr. Stallone Kohia's research in the Solomon Islands aimed to investigate *H. pylori* prevalence and endoscopic findings in a region with limited health infrastructure. The study found that a quarter of the patients undergoing endoscopy at the National Referral Hospital tested positive for *H. pylori*. Various factors, including gender, occupation, medical history, and lifestyle habits, were associated with *H. pylori* infection. Importantly, the study identified a significant failure rate in the treatment of *H. pylori*. These findings emphasise the importance of understanding and addressing *H. pylori* prevalence in resource-constrained settings like the Solomon Islands and suggest the need for community-based screening programs.

## **4.3 Health Policy & Systems**

### **4.3.1 Session One, 04/09/2023 AM**

*Session Chair: Professor Stephen Jan*

#### **4.3.1.1** *A Co-Design Project with Pasifika Communities to Address Health Inequities*

Dr. Malakai Ofanoa's presentation highlighted a co-design research project aimed at addressing health inequities, specifically focusing on gout within the Pasifika community in New Zealand. This collaborative effort involved multiple stakeholders, including community members, researchers, and health professionals. The study employed various phases to identify innovative interventions, prioritising them based on feasibility, cost, and impact. Notable interventions included establishing pharmacist-led one-stop-shops for gout treatment and reducing the rheumatic fever burden. This co-design research model centred on Pasifika voices, emphasising community engagement to dismantle systematic barriers to accessing healthcare. It also showcased the potential for community-led, co-designed interventions to promote health equity.

#### **4.3.1.2** *The Barriers and Enablers of Using ISBAR during Nurses Handover*

Mr. Sione Alalea presented research on the barriers and enablers of using the ISBAR (Identification, Situation, Background, Assessment, and Recommendation) tool during nurse handover in Tonga's Emergency Department. Findings revealed the significance of effective handovers in healthcare, particularly in the context of Tonga. The qualitative research focused on identifying key barriers, such as cultural factors and leadership, and enablers, including training and personal reminders. In addition, findings offered insights into improving handover protocols through education and time management, addressing critical issues that could impact patient outcomes.

#### **4.3.1.3** *Using Systems Science to Co-Create Health Engagement Policy at Brown Buttanean Motivation*

Dr. Faasisila Savila presented research conducted in collaboration with Brown Buttanean Motivation (BBM), a community organisation in New Zealand, aimed at addressing obesity among Māori and Pasifika populations. The study applied systems dynamics and qualitative co-design methods to understand the factors influencing engagement in BBM's health programs. This research model involved cognitive mapping interviews and group model building to identify key themes and domains related to engagement. The study offered valuable recommendations for policy development, emphasising the significance of culturally-centred systems dynamics to create evidence-based health policy collaboratively with stakeholders.

#### **4.3.1.4** *Emergency Nurses KAP Regarding Disaster Preparedness & Management in Emergency Departments, at the Northern Division, Fiji Islands*

Mr. Ajnesh Avinit Prasad presented research exploring the knowledge, attitude, and practices (KAP) of emergency nurses regarding disaster preparedness and management in Fiji's Northern Division. The study included 61 nurses from

different healthcare facilities and identified significant knowledge and positive attitudes among the participants. Findings also revealed that only 43% of nurses had adopted standard practices to coordinate disaster preparation and response, primarily due to limited awareness of relevant policies and training. Findings emphasise the need for increased training, comprehensive disaster policies, and a coordinated approach to enhance disaster preparedness and management in the healthcare sector.

#### **4.3.2 Session Two, 04/09/2023 PM**

##### ***Session Chairs: Professor Mahomed Patel & Dr. Ana Ratu***

#### **4.3.2.1 *Broker of Change: The WISH Project's Innovative Cross Sectoral Local Government Engagement***

Mr. Ratu Timoci Naivalulevu presented the methodology of the WISH Fiji Project, an innovative initiative that involves cross-sectoral local government engagement. The project addresses health issues related to leptospirosis, typhoid, and dengue. By collaborating with local governments, the project enhances its reach and sustainability. The project has highlighted the importance of aligning project goals with government strategies, involving collaborative partners, and maintaining active communication. Challenges were acknowledged, emphasising the need for a comprehensive, place-based approach to engage effectively across disciplines. Findings from project implementation underscore the significance of working with communities and government bodies to address pressing health issues and improve the well-being of the population.

#### **4.3.2.2 *Cuban Cooperation for Health in the Pacific***

Dr. Sharon McLennan discussed the Cuban Cooperation program for health in the Pacific, focusing on the experiences of Pacific Islander graduates who studied medicine in Cuba. The study explored the impact and challenges these graduates faced in their home countries. Findings revealed the positive influence of Cuban medical assistance on the medical workforce in the region but also highlighted areas that required improvement, such as standardised clinical training for returning graduates. This presentation highlighted the potential of international partnerships in addressing healthcare workforce challenges. It offers valuable insights into the experiences of graduates and the need for tailored support upon their return.

#### **4.3.2.3 *The Prevalence of Burnout Amongst Nurses in the Emergency Department in CWM Hospital, Suva***

Mr. Shanil Sukul presented findings from a study on the prevalence of burnout among nurses in the Emergency Department of CWM Hospital, Suva. The research found high levels of burnout among ED nurses, particularly in the personal and work-related domains. The findings emphasised the need for work-based policies to mitigate burnout and support nurses through education and other interventions. Findings highlight the importance of addressing nurse burnout, a critical issue for the healthcare workforce's well-being. By recognizing the

prevalence and consequences of burnout, the healthcare system can take steps to ensure the safety and health of its nursing staff.

#### **4.3.2.4** *Faith-Based Organizations in Health: The Perceptions of FBO Leaders in Addressing Health*

Ms. Arieta Latianara explored the role of faith-based organisations (FBOs) in addressing health, particularly within a “Healthy FBO Settings” approach. FBOs were recognised for their potential to influence and deliver health interventions. The study emphasised the importance of tailor-made FBO health interventions, collaborative stakeholder involvement, and understanding the specific needs of the target audience for effective health promotion. This research highlights the role of FBOs as key players in health interventions. It underscores the need to develop targeted interventions that align with the values and structures of these organisations to promote health effectively. Collaboration with FBOs can have a profound impact on community health.

#### **4.3.2.5** *Prevalence and Consequences of Workplace Violence Against Emergency Nurses in the Northern Division, Fiji Islands*

Mr. Monish Vikash Deo presented on workplace violence against emergency nurses in the Northern Division of Fiji Islands. His study revealed high prevalence rates of workplace violence, particularly verbal abuse. Findings show the urgent need for policies and education to address workplace violence and ensure the safety and well-being of emergency department nurses. This presentation highlighted the critical issue of workplace violence in healthcare settings and its detrimental impact on the well-being of emergency department nurses. Recognising the prevalence of such violence is a crucial step in addressing this problem and emphasises the need for proactive policies and support systems to ensure the safety of healthcare workers in challenging environments.

### **4.3.3 Session 3, 05/09/2023 PM** **Session Chair: Dr. Suneil Nath**

#### **4.3.3.1** *Surgical, Obstetric, and Anaesthesia Care Capacity in the Fiji Islands*

Dr. Jope Makutu and Dr. Arunesh Sundar conducted a comprehensive assessment of surgical, obstetric, and anaesthesia care capacity in Fiji. Their study revealed disparities in resource availability across different regions and emphasised the need for training, infrastructure development, and educational initiatives to ensure better access to these essential services. The research aimed to address this discrepancy in access to safe surgical and aesthetic care, as well as improve patient outcomes, especially in underserved areas. This presentation highlighted the importance of closing the gap in healthcare resources to provide quality surgical and obstetric care in Fiji.

#### **4.3.3.2** *Fiji Oxygen Project - Partnership and Policy in Practice*

Ms. Udila and Professor Stephen Howie presented the Fiji Oxygen Project as an exemplary partnership model. This collaboration between government agencies, international organisations, NGOs, and the private sector was designed to address oxygen supply challenges in Fiji. Their project has successfully bridged the gap between research, policy, and practice by developing a National Oxygen Policy, offering evidence-based recommendations to address Fiji's unique challenges. The project emphasises the importance of trust and effective partnerships in healthcare. The partnership also serves as a model for other countries working towards Universal Health Coverage.

#### **4.3.3.3** *Critical Care Capacity in PICTs: Building on Challenges and Opportunities from COVID-19*

Dr. Silina Motofaga explored the critical care capacity in Pacific Island Countries and Territories (PICTs) during the COVID-19 pandemic. Dr. Motofaga's research identified challenges in strengthening critical care services in low-resource settings, emphasising the need for continued support, investments, and commitment from donors and political leaders. Despite an increase in critical care capacity during the pandemic, significant challenges remained, highlighting the importance of ongoing efforts to improve critical services and emergency response in PICTs. The study reinforces the need for resilient healthcare systems in the face of public health crises.

#### **4.3.3.4** *Auditing Hospital Admissions to Estimate the Burden of Sepsis in Clinical Settings in Kiribati*

Dr. Lamour Hansell conducted an audit to estimate the burden of sepsis in clinical settings in Kiribati. The study revealed a significant mortality rate among admitted patients classified as sepsis cases, underscoring the urgent need for improved prevention, diagnosis, and clinical management of sepsis in Kiribati and the broader Pacific region. This research has significant implications for healthcare and highlights the critical importance of awareness, further research, and efforts to address sepsis as a major public health concern.

#### **4.3.3.5** *Clinical Practice Guidelines: Their Utility, Dissemination, and Monitoring at CWMH – A Mixed Methods Study*

Dr. Ashnita Ashvini Krishna's study focused on Clinical Practice Guidelines (CPGs) at CWMH, investigating their utility, dissemination, and monitoring. The research revealed that CPGs play a crucial role in standardising patient care and clinical decision-making. However, challenges in accessing and implementing these guidelines were noted, highlighting the need for structured guidelines in improving patient care. The study called for enhanced guidelines definition and implementation, maximising dissemination, monitoring of guideline usage, and further research to evaluate the effectiveness of existing guidelines. Findings reveal the critical role of CPGs in healthcare policy and their impact on patient care outcomes in Fiji.

## **4.4 Reproductive, Maternal, Newborn, Child & Adolescent Health**

### **4.4.1 Session One, 05/09/2023 AM**

*Session Chairs: Dr. Christopher Fox & Litia Narube*

#### **4.4.1.1 *Sexual and Reproductive Health Education Policy and Services for Pacific Youth***

Dr. Radilaite Cammock and Mr. Malcolm Andrews presented an ongoing study that focuses on sexual and reproductive health (SRH) education policy and services for Pacific Youth, particularly in New Zealand. The background of their research highlighted low contraceptive use among Pacific Youth and the influence of pornographic sites as sources of sex information. The study aimed to investigate the experiences of Pacific Youth, including taboo subjects, relationships, honour, humility, and compassion, regarding SRH education. They introduced a framework called SET TIKO, addressing trust and privacy, online safety, social media, forming healthy relationships, sexual harassment and abuse, body autonomy and consent, and mental wellbeing. During the Q&A session, the presenters discussed how parents engage in discussions about taboo topics with their children, and their plan to analyse talanoa sessions with parents and teachers to further their research.

#### **4.4.1.2 *Adolescent Understanding of Concepts Related to the Developmental Origins of Health and Disease: A Pacific Perspective***

Ms. Melenaite Tohi discussed her research which focuses on the developmental origins of health and disease (DOHaD) concepts, primarily in adolescents in Aotearoa New Zealand, with a specific emphasis on Pacific adolescents. Her study aims to identify the baseline understanding of DOHaD concepts among adolescents aged 16-19. Preliminary findings indicate a low awareness of DOHaD concepts, particularly among Pacific adolescents. This research highlights the importance of improving adolescent health literacy, especially in communities with a higher burden of non-communicable diseases (NCDs). Data analysis is ongoing and further discussions with adolescents will be conducted to gain deeper insights into the findings.

#### **4.4.1.3 *Reporting of Child Sexual Abuse in Fiji***

Dr. Adriu Naduva presented a study addressing the reporting of child sexual abuse (CSA) in Fiji. The research aimed to explore how the system, culture, and religion impact mandatory reporting of CSA in Fiji. Enablers and barriers to CSA reporting were identified, including issues such as technical capacity, resource limitations, and policy gaps. The study discussed the need for strengthening the mandatory reporting system and involving medical officers and health professionals in training to report child abuse cases. Dr. Naduva also highlighted the importance of support in managing CSA cases. This research aims to ensure a functional system is in place for the reporting of child sexual abuse.



#### **4.4.1.4** *The State of Cervical Cancer Screening in Vanuatu: A Retrospective Analysis 2015-2020*

Dr. Boniface Damutalau discussed the state of cervical cancer screening in Vanuatu, focusing on a retrospective analysis spanning from 2015 to 2020. The study aimed to provide insights into the coverage of secondary prevention of cervical cancer and highlight the challenges and facilitators of the screening program. The study identified variations in screening rates across provinces and the treatment rate of premalignant lesions. It emphasised the need for an effective screening program to increase screening rates. During the Q&A session, the presenter discussed midwives' roles in conducting screening programs and the introduction of self-collection projects to enhance the screening process.

#### **4.4.2** **Session 2, 06/09/2023 AM**

***Session Chairs: Professor Cameron Grant & Dr. Rachel Devi***

#### **4.4.2.1** *Epidemiology of Rheumatic Heart Disease in Fiji*

Rheumatic Heart Disease (RHD) is a severe issue in Fiji and Oceania. This presentation by Ms. Poonam Pal delved into the epidemiology of RHD using data from a retrospective review of hospital admissions and deaths in Fiji from 2012 to 2021. The study highlights regional variations, gender differences, and ethnic disparities in RHD cases and survival rates. These findings underscore the need for further research and targeted interventions to combat RHD effectively.

#### **4.4.2.2** *Rheumatic Fever and RHD-Related Knowledge, Attitudes, Practices, and Health-Seeking Experiences in Fiji*

Mr. Roneel Chandra presented a study that examined the knowledge, attitudes, and practices related to Acute Rheumatic Fever (ARF) and Rheumatic Heart Disease (RHD) among the people of Fiji. Preliminary findings reveal significant gaps in community knowledge and highlight the need for increased awareness about ARF/RHD in Fiji. Additionally, the study has uncovered barriers to accessing healthcare services, including financial constraints, traditional medicine preferences, and concerns about the quality of healthcare services.

#### **4.4.2.3** *Lived Experiences of Patients With Rheumatic Heart Disease and Their Access to Services in Fiji*

Ms. Jyotishna Mani's presentation explored the lived experiences of patients with Rheumatic Heart Disease (RHD) in Fiji. This study highlights the challenges patients face, such as delayed diagnosis, financial barriers, and geographical limitations when accessing healthcare services. Findings reveal the need for improved support and understanding for individuals living with RHD, as the disease has a profound impact on physical and mental health, leading to issues like stigma, depression, and social challenges.

#### **4.4.3 Session Three, 06/09/2023 AM**

***Session Chairs: Professor Stephen Howie & Dr. Kesaia Nawaqaliva***

##### **4.4.3.1** *Incidence and Clinical Outcomes of Maternal and Congenital Syphilis at the Colonial War Memorial Hospital, Fiji*

Dr. Stephanie Clark presented a study focusing on the incidence and clinical outcomes of maternal and congenital syphilis in Fiji. This research, which began in 2019, aims to address the lack of data on this topic in the Pacific region. Through a double-blinded randomised control trial involving 210 mothers and their babies, the study reveals concerning statistics, with a substantial number of seropositive pregnant women and a high incidence of probable congenital syphilis. These findings emphasise the urgency of addressing this preventable and treatable disease, suggesting the need for further research and public health interventions to reduce maternal and congenital syphilis in Fiji.

##### **4.4.3.2** *The Association Between Dietary Pattern and Risk of Anaemia among Pregnant Women: Matched Case-Control Study*

In her presentation, Ms. Arishma Prasad shed light on the issue of anaemia among pregnant women in Fiji. With a prevalence of over 40% among pregnant women, anaemia is a major public health problem. Prasad's study aims to identify the association between dietary patterns and the risk of anaemia in pregnant women. The research, based in Fiji, involved a matched case-control study with 104 pregnant mothers. Findings reveal a concerning lack of iron in the diet of pregnant women, with low consumption of organ meat. Economic challenges and high costs of healthy foods contribute to this dietary issue. The study shows the importance of education, awareness, and support for pregnant mothers in addressing anaemia and improving their diets.

##### **4.4.3.3** *Fiji AnteNatal Echocardiographic Screening for RHD by Non-Expert Health Professionals*

Dr. Jimaima Kailawadoko discussed a pilot study aimed at diagnosing Rheumatic Heart Disease (RHD) in pregnant women attending the Colonial War Memorial Hospital (CWMH) in Suva, Fiji. Trained non-expert medical staff used rapid echocardiography screening to identify RHD cases among pregnant women. Results suggest that integrating echo screening into antenatal care is feasible and could be a game-changer in the early detection of RHD, potentially saving lives and improving access to care for pregnant women in Fiji.

## **4.5 Oral & Auditory Health**

### **4.5.1 Session One, 05/09/2023 AM** **Session Chair: Dr. William May**

#### **4.5.1.1** *The Effectiveness of Primary Ear and Hearing Care Training in Fiji*

Dr. Oh Chungheon presented a study on the effectiveness of primary ear and hearing care (PEHC) training in Fiji. With a high prevalence of ear diseases and hearing impairments in Fiji, this study aimed to assess the impact of PEHC training on primary health care workers. The research employed a mixed-methods approach, combining quantitative surveys and qualitative interviews to evaluate the use of essential PEHC skills and ear hygiene education after training. Results showed a significant increase in the application of otoscopy, hearing screening tests, ear irrigation, and ear hygiene education following the training. This study emphasises the positive impact of PEHC training in enhancing the ear and hearing care skills of primary health care workers in Fiji and underscores the need for its wider implementation across primary health care settings.

#### **4.5.1.2** *Revolutionizing Access, Transforming Outcomes: Remote Orthodontic Care in the Pacific Islands*

Dr. Hemanth Tumkur Lakshmikantha discussed the challenges and innovations in remote orthodontic care in the Pacific Islands. A survey in 2022 revealed a significant demand for orthodontic care in Fiji, but there is a shortage of skilled specialists. To address this issue, Dr. Lakshmikantha highlighted the importance of building capacity through flexible work-study programs and micro-credentialing. He introduced the concept of “teleorthodontics,” enabling dentists to consult with specialists remotely. Dr. Lakshmikantha emphasised the need for courses based on regionally relevant research and discussed challenges related to infrastructure shortcomings. This presentation showcased how technology and innovation can revolutionise orthodontic care, improve access, and bring about transformative outcomes in remote Pacific Island communities, with emphasis on the value of collaboration and cultural sensitivity in healthcare delivery.

### **4.5.2 Session Two, 05/09/2023 PM** **Session Chair: Dr. Suneil Nath**

#### **4.5.2.1** *Esophageal Cancer Palliation in the Solomon Islands*

Dr. Denton Aota discussed the palliative care treatment of esophageal cancer in the Solomon Islands, a region with limited cancer data. Most patients presented with advanced, incurable disease, highlighting the urgent need for improved early diagnosis and prevention strategies. The study revealed that betelnut chewing and smoking were significant risk factors. Esophageal stent placement was a key intervention for palliation. Patients experienced temporary symptom relief, but most ultimately succumbed to the disease. Dr. Aota’s work sheds light on the challenges of managing advanced-stage esophageal cancer in resource-limited settings, where palliative care remains a crucial aspect of treatment.

#### **4.5.2.2** *Burden of Midface Injuries in Fiji*

Dr. Moape Naleba's presentation focused on midface injuries in Fiji, examining their prevalence, aetiology, and management. The study revealed that sports, falls, and work-related injuries were the leading causes of midface injuries in Fiji. This data underscores the importance of reviewing occupational health and safety policies in workplaces, promoting safe sporting equipment, and implementing fall prevention measures. Also highlighted is the need for accurate imaging and treatment methods, such as Open Reduction Internal Fixation (ORIF), to address midface injuries effectively. Dr. Naleba's research emphasises the significance of addressing the specific causes and management of midface injuries in Fiji to enhance patient care and safety.

## **4.6 Medical Education**

### **4.6.1 Session One, 05/09/2023 AM** *Session Chair: Dr. William May*

#### **4.6.1.1** *Experiences of Third Year Student Nurses during Rural Clinical Practice: A Qualitative Study*

Ms. Samsun Nisha Ayub presented an exploration of the experiences of third-year student nurses during rural clinical practice. She aimed to investigate the perception of nursing students during clinical placements, focusing on their encounters with the theory-to-practice gap, culture shock, and perceived tension. Ms. Ayub's research is using a qualitative phenomenological methodology, which aims to provide insights into the experiences of nursing students in rural clinical placements. Results are expected to guide the management of the School of Nursing and the Fiji National University in developing strategies to offer better support to nursing students during their clinical placements in rural communities. Ms. Ayub's study highlights the importance of understanding and addressing the challenges and needs of nursing students in rural clinical practice.

#### **4.6.1.2** *Challenges Faced by First-Year Nursing Students for Their Online Learning during the COVID-19 Period*

Mr. Dharmendra Naidu discussed the challenges encountered by first-year nursing students during the COVID-19 pandemic, which necessitated a rapid shift from face-to-face to online learning. Traditionally, teaching followed a 90/10 split, with 90% of instruction conducted in a face-to-face format. However, the sudden transition to 100% online learning without prior adjustment presented a range of issues. Naidu's study, based on student surveys, identified challenges related to internet access, electricity, and potential financial barriers. Findings emphasise the importance of policy support for students in addressing these challenges and facilitating their transition to online learning during such unprecedented times. This presentation highlights the significance of adapting to changing circumstances and ensuring equitable access to education in the face of crises like the COVID-19 pandemic.

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# 9.0 GALLERY















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