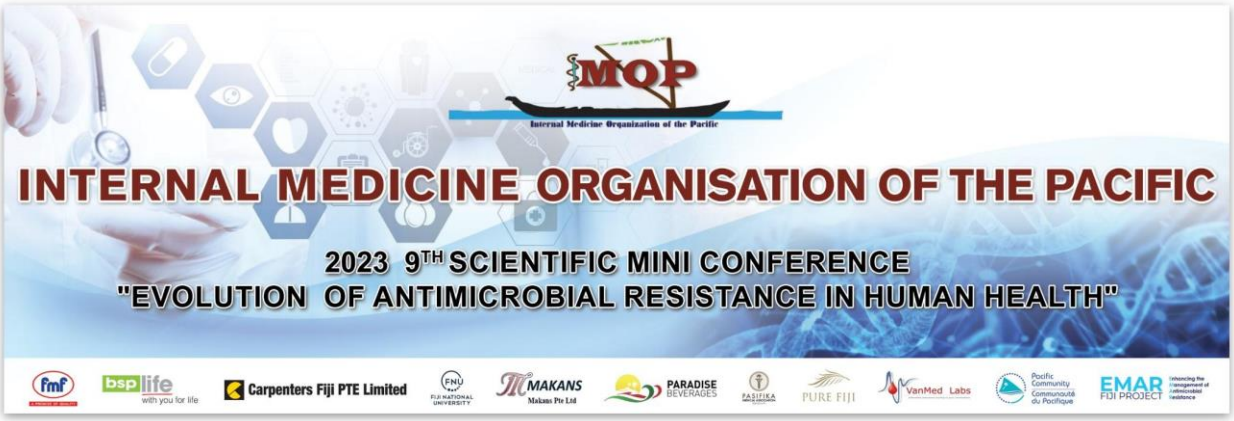
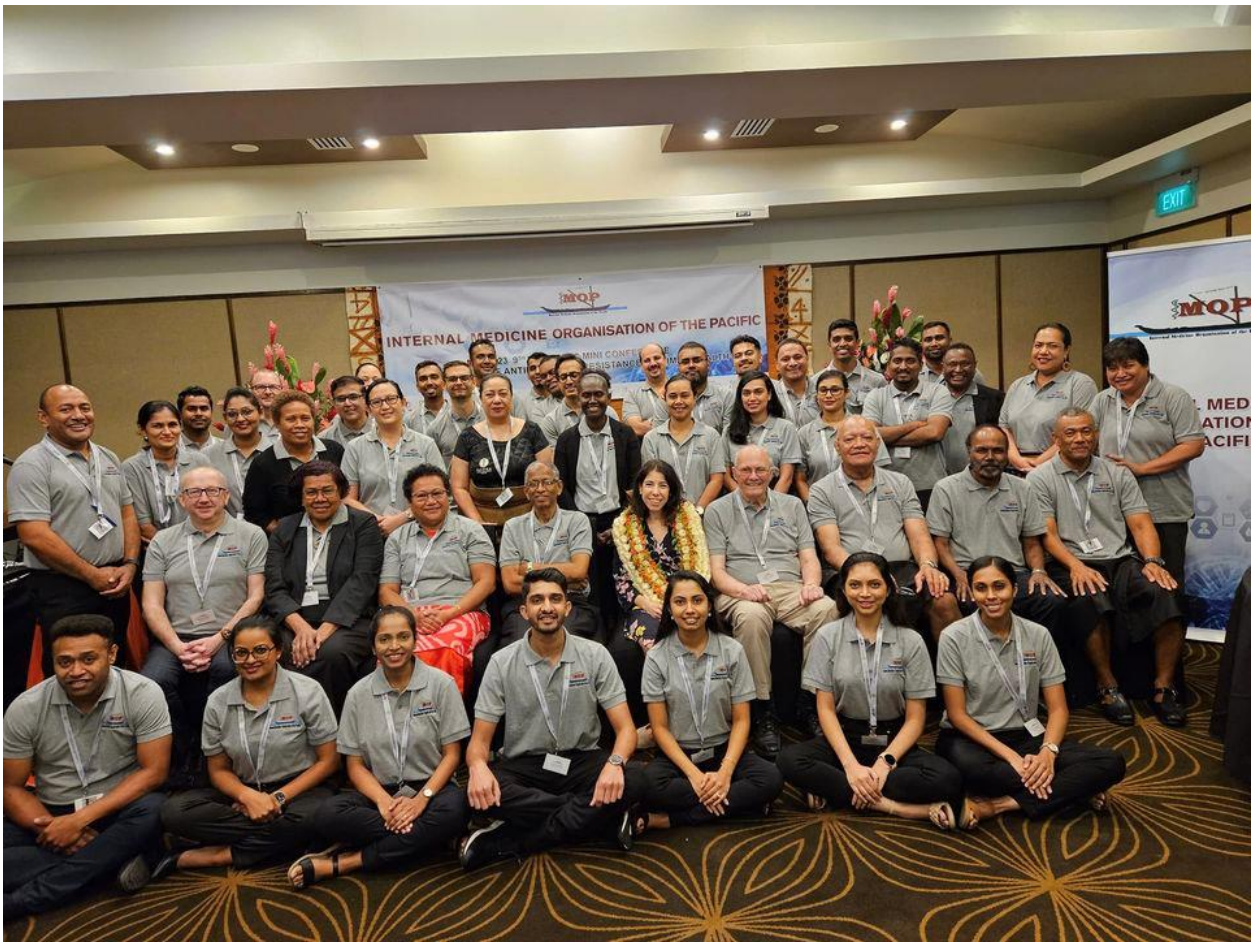
2023 Scientific IMOP Conference Report





The Internal Medicine Organization of the Pacific held its 9th Scientific Conference on the 18th and 19th August 25, 2023 at Holiday Inn in Suva, Fiji.

In 2015, the World Health Assembly recognised AMR as a global threat. Some of the goals of the Global Action Plan was to improve awareness and understanding of antimicrobial resistance, strengthen knowledge through surveillance and research; to reduce the incidence of infection and to optimize the use of antimicrobials. Pacific Island nations are low to middle income countries are not spared the scourge of AMR.

The theme of the 2023 hybrid conference was chosen as **"Evolution of Antimicrobial Resistance in Human Health".**

We hoped to achieve some of these Global Action Plans in this conference to create awareness of AMR and strengthen the knowledge and skills to combat AMR in the Pacific.

In the past the previous executive's committee tried to collaborate with Internal Medicine Australia and New Zealand (IMSANZ) to host a combined conference however those plans in 2020 fell through due the covid pandemic with the closure of borders. The Current Executives were pleased to invite the IMSANZ members to join the hybrid conference virtually.

A total of 107 registered to attend the conference, there were 27 Associate Members, 28 Full Members and 3 invited nonmembers (ICU, Pediatrics and Infection Prevention Control reps) who attended in person and the rest attended virtually.

We also had guest speakers who attend from Pasifika Medical Association, SPC, EMAR project and National Antimicrobial Resistance Committee (NARC).

Representatives from the Pacific Region who were able to attend in person or zoom.

1) Samoa – Dr Kamara Vaai (In person)
2) Kiribati – Dr Thomas Russell (In person)
3) Solomons – Dr Alice Siuna (in person) & Dr Emire Meone and Dr Rebecca Pianu (zoom)
4) Tonga – Dr Loutoa Poese and Dr Veisinia Matoto (In person)
5) Vanuatu _ Dr Minado Paul and Dr Tannia Banini (In person)
6) East Timor- Leonia Marias dos Reis Seixa and Joao Henrique Araujo da Piedade (In person)
7) Federal States of Micronesia Dr Mai Ling Perman (In person)

We were very fortunate to have the Royal Australian College of Physician sponsor and secure a speaker Professor John Ferguson (Infectious Disease Physician and Microbiologist from John Hunter Hospital, NSW, Australia) however he was not able to attend in person but presented virtually.

Other speakers from the Pacific and Internationally included were:

Dr Takeshi Nishijima, Technical Officer in AMR WHO, WPRO Phillipines

Ms. Deborah Tong, Technical Officer in AMS WHO Geneva Headquarters

Professor Robert Pickles, ID physician John Hunter Hospital, Australia

Rietie Venter, Associate Professor University of South Australia

Walter Okello. Commonwealth Scientific and Industrial Research, Australia

Anton Peleg, Professor of Infectious Diseases and Microbiology, Director of the Department of Infectious Diseases at The Alfred Hospital and Monash University, Australia

Dr Michael Loftus is an Infectious Diseases Physician and researcher from Monash University, Australia.

Dr Veisinia Matoto, Pasifika Medical Association, Tonga

Dr Minado Paul, Vila Central Hospital, Vanuatu

Dr Chia Po Ying, Infectious Disease Physician, National Centre Infectious Disease, Singapore

Dr Anne Drake, St Vincent Hospital, Australia

Professor Adam Jenney, Infectious Disease Physician, Alfred Hospital, Australia.

Mr. Reenal Chand, NARC Secretariat, President of Fiji Pharmacy Society

Dr Eka Buadromo, SPC

Dr Alice Siuna, National Referral Hospital, Solomons Islands

Dr Loutoa Poese, Vaiola Hospital, Tonga

Dr Madhvi Poonam, Aspen Hospital, Lautoka Fiji

Dr Ana Suka, CWMH, Fiji

Dr Vishal Kumar, MMED 4 student, Fiji

Dr Thomas Russell MMED 4 student, Kiribati.

Conference Program

This year it was a great to have a WHO representative Ms. Eva Mata Martine to be our Chief Guest.

Dr Emi Penuel was the Master of Ceremony and Dr Veisinia Matoto gave the opening prayer.

Dr Emi Penuel IMOP President 2023/2024 gave a welcome speech. Welcoming the senior most, veteran Physicians of Internal Medicine in Fiji and the South Pacific: Dr G. Rao, Drs. Ratu Joji Malani, Dr.

Narayan. She then invited Dr William May Dean of College of Medicine Nursing Health Science of Fiji National University for a special welcome to Professor Robert Moulds:

Prof. Robert moulds

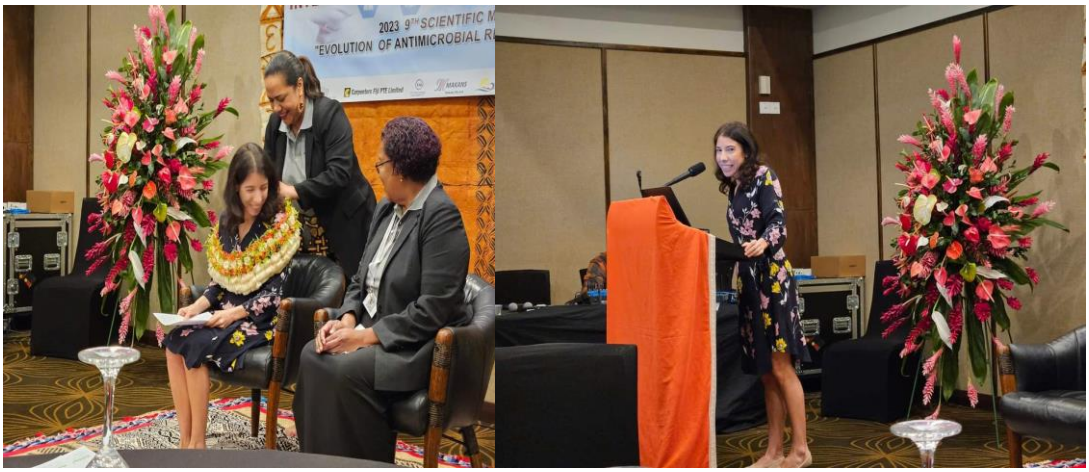
1. An Icon in the training of medicine in Fiji and the Pacific
2. Pioneer in the Established the PG training program at FSM and later FNU
3. Still the Emeritus Professor at the FNU
4. He trained all of us.
5. Life member of IMOP and Lovely to see you here and join our IMOP family and your presence here is like bringing home one of our fathers.

In the President's speech she mentioned iMOP is now in its 9th Year of existence since its inception in 2014. Just like any growing organism, it has gone through its own developmental milestones, its obstacles, trials and testing to solidify its place in the Medical Fraternity. As an organization we look forward with much anticipation to celebrating its 10th Year/1st decade of Anniversary, next year in 2024.

The theme was chosen by the current Executive Committee for this year's conference, stems out of the realization that AMR is a very REAL, ALARMING clinical, public health and world health nightmare staring at us all, across multidisciplinary departments in the Health Sector. The emergence and spread of drug resistance pathogens, that have acquired new resistance mechanisms, leading to antimicrobial resistance, threatening our ability to treat common infections.

It is timely that we talk AMR as the implications of it, has a far outreach according to the 4 out of 10 Key Facts of WHO:

- iMOP is aware of WHO stating that AMR is one of the 10 Global Public Health threats facing Humanity.
- AMR is a Global Health development threat requiring Multisectorial action in order to achieving Sustainable Development Goal (SDG)
- The Cost of AMR to the Economy of any nation is Significant.
- WHO inferred there's not much eventuating in the development space of new antimicrobials/antibiotics research.



In her keynote address, the Chief Guest Ms. Eva to expressed her sincere appreciation for the IMOP 2023 Organising Committee for the interest on the topic and choosing AMR as the theme for this year's conference. Additionally, she acknowledged the continuous efforts that medical professionals and in special, internal medicine doctors, across the Pacific Island Nations are putting on the crucial issue of AMR, following the 2015 World Health Assembly resolution that recognized AMR as a global threat. AMR is already causing an enormous burden of preventable morbidity and mortality in the Western Pacific and globally, and Pacific Countries are not spared of the threats of AMR. Without effective and sustained action this burden is unfortunately projected to further increase over the next decade. A recent WHO report on Health and economic impacts of antimicrobial resistance in the Western Pacific Region, 2020 – 2030, indicates that between now and the end of 2030, up to an estimated 5.2 million people in the Western Pacific Region are expected to die because of drug-resistant bacterial infections. AMR also has big economic impacts – the previously mentioned report estimates that by 2030, AMR can cost the Region up to an estimated total of US$ 148 billion – nearly 10% of the Region's total health expenditure in 2019 and affecting low-income countries more severely. AMR is a silent pandemic endearing people's health and a huge threat to safe and quality care in areas like maternal, child and reproductive health, infectious disease management, cancer therapy and surgery. It is also a major health security threat. She emphasised that all of us play critical roles in the fight against AMR and implementing AMR actions in your respective clinics, hospitals, and countries and encouraged everyone to actively participate, share your expertise and engage in thoughtful discussions and to collaborate and coordinate actions across disciplines, hospitals, and countries.

The opening ceremony ended with the Vote of Thanks by Dr Aminiasi Rokocakau IMOP Vice President.

DAY ONE

Session 1

1. **"Overview of AMR in the Western Pacific",** Dr Takeshi Nishijima talked about the first World Health Organization (WHO) regional assessment on health and economic impact of antimicrobial resistance (AMR) released in June 2023. WPRO's support to Member States to avert the impact of AMR will be introduced during this meeting, including our "four beads in a chain" systems approach to focus on four activity areas including antimicrobial consumption monitoring, antimicrobial stewardship, AMR pathogen surveillance, and outbreak response.
2. **"Tackling AMR with Antimicrobial stewardship"** Deborah mentioned that a set of integrated actions which promote the responsible and appropriate use of antimicrobials, and is a strategy for improving patient outcomes, minimizing the emergence of AMR and reducing healthcare costs. These actions should be evidence-based and context-specific and may be supported by various guidance and tools.
3. **"Bad Bugs Few Drugs",** Professor Pickles' presentation addressed the growing threat of antimicrobial resistance and the shortage of agents with which to treat these infections.
4. **"Understanding and combatting antimicrobial resistance in aged care in Australia",** Associate Professor Rietie summarized her research work on the surveillance of antimicrobial resistance (AMR) in aged care in Australia and use case studies to illustrate the benefit of combining antimicrobial sensitivity analysis with whole genome sequencing.

Session 2

1. **"One health",** Dr Walter Okelo elaborated using a One Health perspective is needed to improve our understanding of major health threats such as emerging zoonotic infections, disease spill over, and the spread of antimicrobial resistance (AMR) across ecosystems. Successful implementation of One Health will require improved coordination, communication, and collaboration between sectors, reinforced by capacity building.
2. **"Diagnostic microbiology and antimicrobial resistance control: an overview of laboratory and clinical capacity development facilitated by PRIDA" ,** Professor Ferguson talked on Pacific Region Infectious Diseases Association that utilizes a multi-faceted approach to achieve best management and control of infectious diseases including: and Development of long-term

relationships with infectious disease professionals in the Pacific and South East Asian region Practical support for development of diagnostic microbiology and laboratory quality management , Post-graduate courses in diagnostic microbiology for scientists and doctors On-the-ground training – one on one mentoring, teaching ward and laboratory rounds, clinical laboratory rounds, workshops, seminars and practical sessions.

3. **"Phage Therapy – Past, present and the future",** Professor Anton Peleg talked about the history of bacteriophage and the future of phage therapy in human as a vector to deliver therapeutics or vaccine, prophylaxis during outbreak and biodefense; in animal veterinary treatment and replace antibiotics in livestock; in environment food safety, disinfecting wastewater and replacing antibiotics in agriculture and aquaculture.

Session 3

1. **"Pasifika Medical Association",** Dr Veisinia explained about PMA that is clinically led, culturally anchored and family driven. The humanitarian assistance, membership activities, New Zealand Medical Treatment Scheme, Overseas Referral Scheme and Strengthening Country Capacity.
2. **"Antimicrobial resistance and antibiotic prescribing patterns among medical providers in Vanuatu",** Dr Minado Paul talked on the evidence of increasing AMR in both Access and Watch Aware WHO classified antibiotics in the Vanuatu Essential Drug List (EDL). Majority of medical providers in Vanuatu regularly prescribe antibiotics. A survey conducted among local doctors indicates the tendency for judicious prescribing of antimicrobials for patients with evidence of bacterial infection. Medical providers prescribe predominantly ACCESS antibiotics in their routine practice, there is increasing reliance on WATCH antibiotics especially for inpatient use which may drive AMR if left unchecked. The launching of the Vanuatu National Action Plan on AMR and strengthening of Infection Prevention and Control (IPC) at the national and hospital levels are steps in the right direction towards AMR containment.
3. **"AMR research in the Pacific", Dr Michael Loftus** talked on the studies he conducted in the Pacific as part of his PHD. The first study was a retrospective analysis of antimicrobial susceptibility results from the national microbiology laboratories of four Pacific Island countries – the Cook Islands, Kiribati, Samoa and Tonga – between 2017 and 2022. This work, containing data from more than 20,000 bacterial isolates, demonstrated significant variation in the prevalence of methicillin resistant Staphylococcus aureus (MRSA) between countries, as well as relatively preserved susceptibility among common Gram Negatives to ceftriaxone.

The second study was a prospective, observational study of 95 consecutive S. aureus bacteremia (SAB) cases admitted at Colonial War Memorial Hospital (CWMH), Suva. Although the prevalence of MRSA was low (8.4%), overall all-cause mortality was high (25.3%) and increased with age (55% among patients aged 60 or older). The final study was a prospective cohort study assessing the attributable mortality of 3rdgeneration cephalosporin resistance (3GC-R) among 162 consecutive patients with Enterobacterales bloodstream infection at CWMH. 3GC-R was present in 66 (40.7%) cases. Crude mortality was higher in the 3GC-R group (30.3% [20/66] vs 16.7% [16/96].

4. **"Artificial Intelligence the future of AMR"** Dr Po Ying illustrated how artificial intelligence can revolutionize the fight against antimicrobial resistance by augmenting traditional approaches and by spearheading novel methods. The intersection of artificial intelligence and healthcare can be harnessed for a transformative force in surveillance, drug development, and antimicrobial resistance. She hoped she provided some points for the upcoming debate on Day 2.
5. **"EMAR Project Fiji"**, Nargina Macalinao emphasized that Fiji was the first country in the Pacific to develop a National Action Plan against AMR and earlier. EMAR Project involvement in AMR activities/ involvement on one health approach (human, animal, and environment sectors).

At the end of Day 1 the participants, guest speakers and sponsors enjoyed a happy hour cocktail at Paradiso Restaurant to wine down and network.

DAY 2

Session 1

1. **"AMR and Surgery", Dr** Anne talked on the principles of surgical prophylaxis and the strategies for the era of AMR, recommendations and adjunct measures.
2. **AMR and Lab,** Professor Adam touched on phenotypic vs genotypic testing and the transition of manual to automation in lab testing. COMBAT-AMR works in partnership with government, National AMR Committees and public health counterparts in Fiji, Samoa, Solomon Islands and Papua New Guinea with the 4 Themes: IPC, AMS, Laboratory capacity + surveillance and Animal Health.

3. **“Pharmacist’s role in AMR”,** Mr Reenal Chand explained on the role of the pharmacist as custodians to ensure that the effectiveness of antimicrobials is preserved for future generations through the judicious, safe and efficacious use of these medicines.
4. **“Pacific Island Countries Antibiogram Data Collection Tool”**, Dr Eka mentioned that in 2019 SPC, WHO, PPTC, PIHOA and the Fiji National University developed a training curriculum that was delivered mostly to the Southern subregional countries from 2019 to 2023 to strengthen AMR laboratory detection, Infection Prevention and Control and Antimicrobial Stewardship. The countries that have not used WHONET software for antibiogram data analysis were shown how to use WHONET for AMR data analysis during the training. Tonga has continued to use WHONET by manually uploading antimicrobial sensitivity tests (AST) results, American Samoa and Fiji have managed to backlink VITEK data into WHONET. With the understanding of the shortfall that countries laboratories have the Pacific Community designed a simple excel Power Bi tool that will enable laboratories to use as microbiology testing worksheet and provides antibiogram data analysis at the same time. 2 year AST data were collected from 3 countries and used to develop the antibiogram.

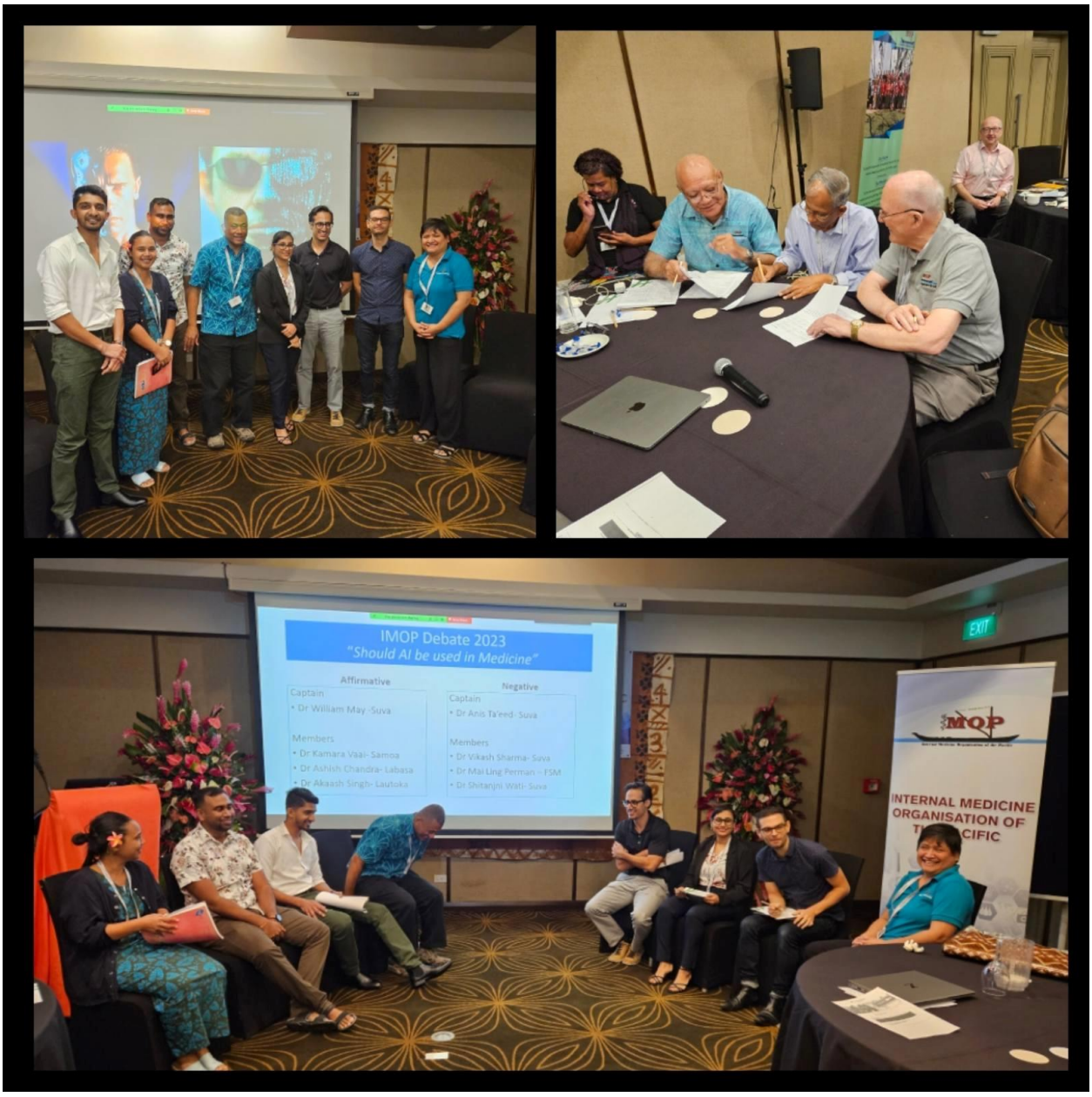
Session 2

1. **“Challenges Facing Resistant TB in Solomon Islands”**, Dr Alice talked on a case study of male with MDRTB and its challenges with health system delay was noted due to lack of appropriate diagnostic tools both in primary care and tertiary care, individual delay was noted -took patient 4 weeks before seeking assistance, Socio-economic status- patient had to wait for a boat to transfer from his province to the main hospital contributing to further delays. Public Health implications 1) delay in contact tracing 2) delay in diagnosis results in delay in isolation and increase exposure and transmission 3) exposing susceptible drugs to Resistant TB, more risk of developing multi-resistant TB.
2. **“Challenges of AMR in Tonga”,** Dr Loutoa mentioned in 2018 as part of her masters research she looks at the epidemiology of staphylococcus bacteremia at Vaiola Hospital. The annual incidence of SAB ranges from 44.3 per to 58.3 per 100,000 from 2015 – 2017. Now Jan - June 2023 57 cases MRSA and 40 cases of ESBL. Some of the challenges in Tonga were staffing issues, drugs, labs and adherence to policy and guideline.
3. **“Current CRO situation in CWM Hospital and the challenges it poses”**, Dr Ana talked on the most critical threat is posed by carbapenemase resistant enterobacteriace (CRE),

carbapenem-resistant (CR) Acinetobacter baumannii (CRAB), and carbapenem -resistant Pseudomonas aeruginosa(CRPA) at CWMH and the challenges in environment cleaning, drugs and laboratory.

4. **"Challenges Faced with Management of Carbapenemase-Producing Enterobacterales (CPE) in Lautoka Hospital", Dr** Madhvi mentioned that managing carbapenemase-producing Enterobacterales in low-resource settings is a complex and multifaceted challenge. This conference talk will serve as a platform to discuss the issues faced, share successful approaches, and foster collaborations to develop sustainable solutions.

DEBATE



Topic: Should Artificial Intelligence be used in Medicine?

Affirmative team: Dr May (Fiji), Dr Asish (Labasa Hospital, Dr Akash (Lautoka Hospital) and Dr Kamara (Samoa).

Negative team: Dr Anis (Australia/Fiji), Dr Vikash (Fiji), Dr Mail Ling (FSM/Fiji) and Dr Shitanjni (Fiji) .

The panel of judges were Professor Robert Moulds, Dr Rao and Dr Malani.

In 2017 the debate was introduced as part of the conference program, this has always been the highlight of the conference. There were a lot of figures, fact and evidence based medicine argued from both sides. It was also entertaining for everyone.

It was unanimous agreement from all 3 judges that the negative team won the debate.

MMED4 PRESENTATION

1. **"Knowledge and seroprevalence of hepatitis B in South Tarawa, Kiribati: 2022"** by Dr Thomas Russell.: A prospective, descriptive study was conducted among HCWs working on South Tarawa and ANMs attending clinic at TCH. An adapted, bilingual questionnaire was used to assess knowledge and perceptions towards HBI. Results: All 103 (100%) participantsinvited in this study responded. Most HCWs (98%) had heard of hepatitis B (HB) and 88.2% correctly identified transmission routes. Only 48.1% of ANMs had heard of HB and an average of 56.7% were able to identify transmission routes. HCWs (90.2%) and ANMs (90.4%) had positive perceptions towards testing, seeking treatment and vaccination. The prevalence of HB among participants was 23.3%.
2. **"Prevalence and Treatment Outcome of Lupus Nephritis at a Tertiary Referral Hospital in Fiji; A Single-Center 5-year Retrospective Study"** by Dr Vishal Kumar. The study was to determine the characteristics of lupus nephritis at CWMH, the various treatment modalities used and identify the patient outcomes, so that the information acquired can help guide clinicians in prompt diagnosis of lupus nephritis and early initiation of appropriate treatment.

The panel of judges for the MMED research presentation was Dr Bharat (Lautoka), Dr Alice (Solomons) and Dr Mai Ling (FNU). The judges deliberated on the winner of the MMED 4 presentations based on content, organization, delivery and response to questions asked. Dr Vishal Kumar was the judged as the Best MMED Research Presentation.

The conference was concluded with the Annual General Meeting on 19th August, 2023. The statement from the Conference was the IMOP members to practice the principles of surgical prophylaxis and to strengthen the 3 pillars to combat AMR in their country of clinical practice

1. Lab surveillance
2. Infection Prevention and Control

3. Antimicrobial Stewardship

The IMOP conference ended with a dinner celebration at Paradiso with the entertainment with the hidden jewel talents of singing and dancing of different country delegates.

Overall the 9th Scientific IMOP conference was a huge success and to have Professor Moulds graced us with his presence. He wrote the curriculum of the MMED Internal Medicine Program; he is truly the Father of Internal Medicine in the Pacific.

He was gifted with a framed IMOP Conference group photo as memoir and token of appreciation for all his hard work and dedication.

Best MMED research was also awarded that night with a gift compliments from Pure Fiji.

The great success of the IMOP conference would not have been possible without the support of our sponsors and subscriptions from IMOP members.

Acknowledgements

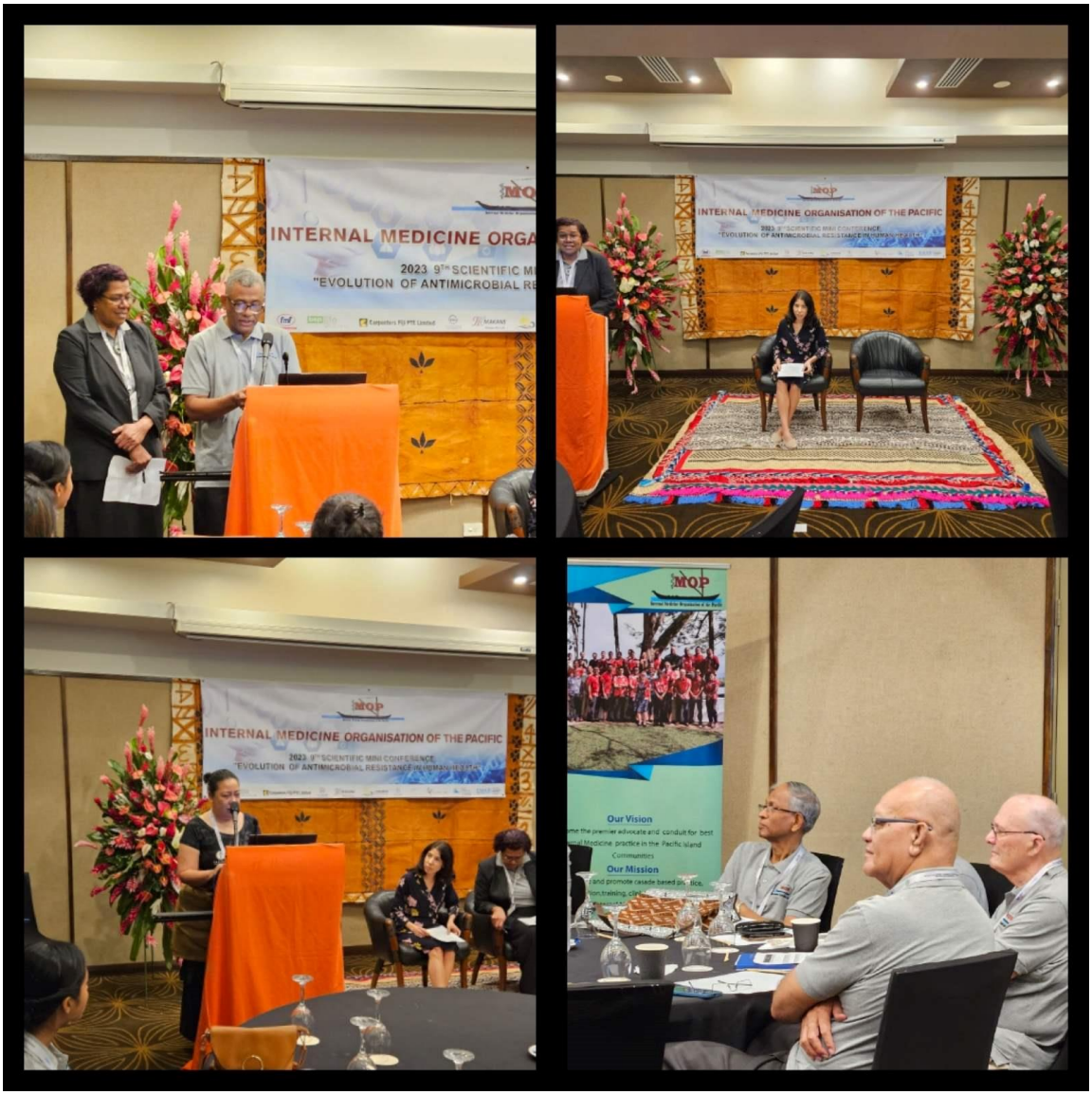
SPC – Vinaka Vaka Levu for your continuous support and sponsorship over the years.

Gold Sponsors – BSP LIFE, VanMed Lab, Paradise Beverage, FMF, Carpentars, Makans Pharmacy

EMAR Project, Pure Fiji, Fiji National University and Royal Australian College of Physicians.

Invited guest and speakers regionally, locally and internationally for taking out time to come and speak in person or virtually & attending the conference.

Lastly the IMOP members for your active membership and continuous support.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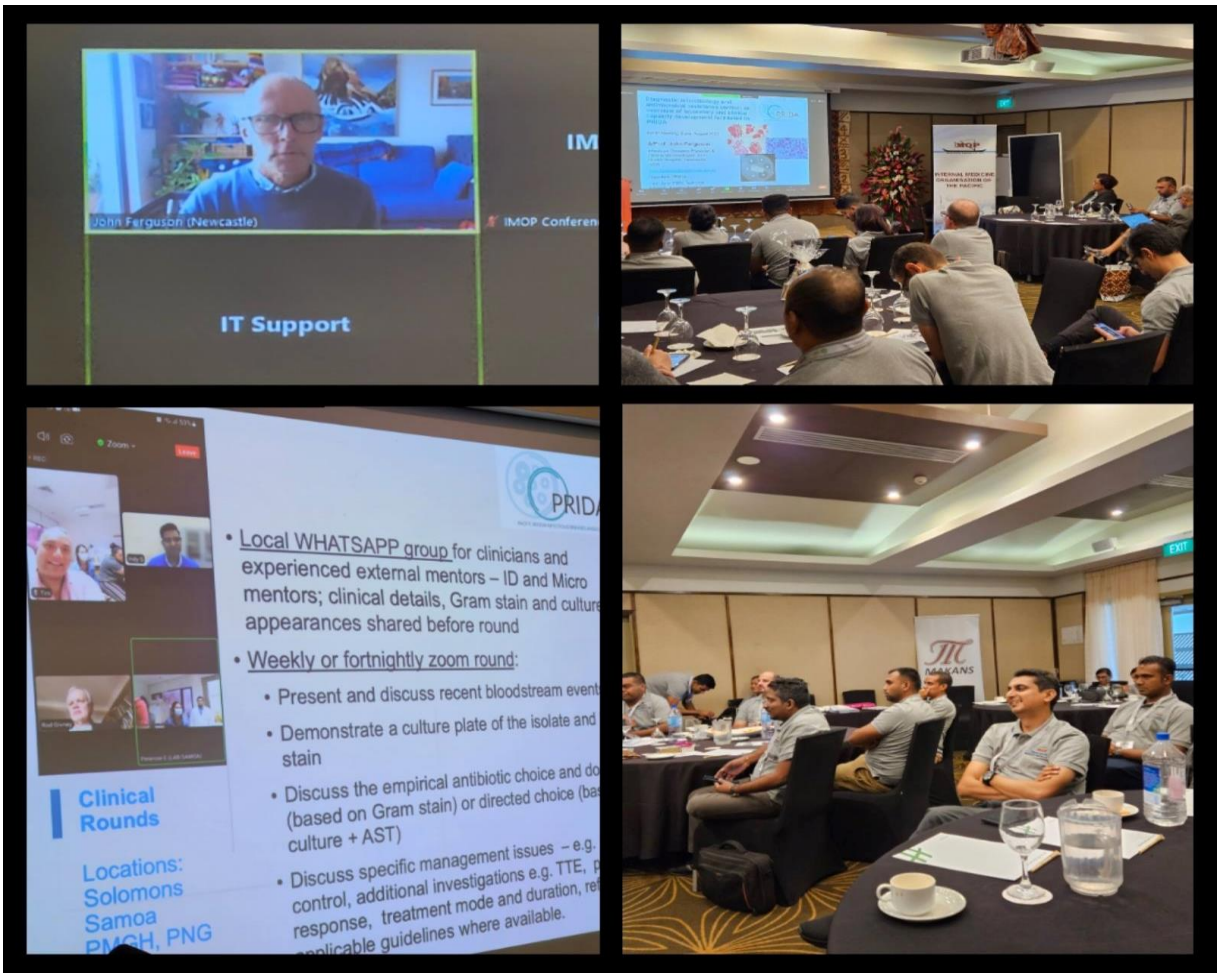
INTERNAL MEDICINE ORGANISATION OF THE PACIFIC
INTERNAL MEDICINE ORGANISATION OF THE PACIFIC
Our Vision
Our Mission


John Ferguson (Newcastle)
IT Support
Zoom
PRIDA
• Local WHATSAPP group for clinicians and experienced external mentors – ID and Micro mentors; clinical details, Gram stain and culture appearances shared before round
• Weekly or fortnightly zoom round:
• Present and discuss recent bloodstream event
• Demonstrate a culture plate of the isolate and stain
• Discuss the empirical antibiotic choice and do (based on Gram stain) or directed choice (bas culture + AST)
• Discuss specific management issues – e.g. control, additional investigations e.g. TTE, response, treatment mode and duration, re
Clinical Rounds
Locations:
Solomons
Samoa
PMGH, PNG
EXIT


INTERNAL MEDICINE
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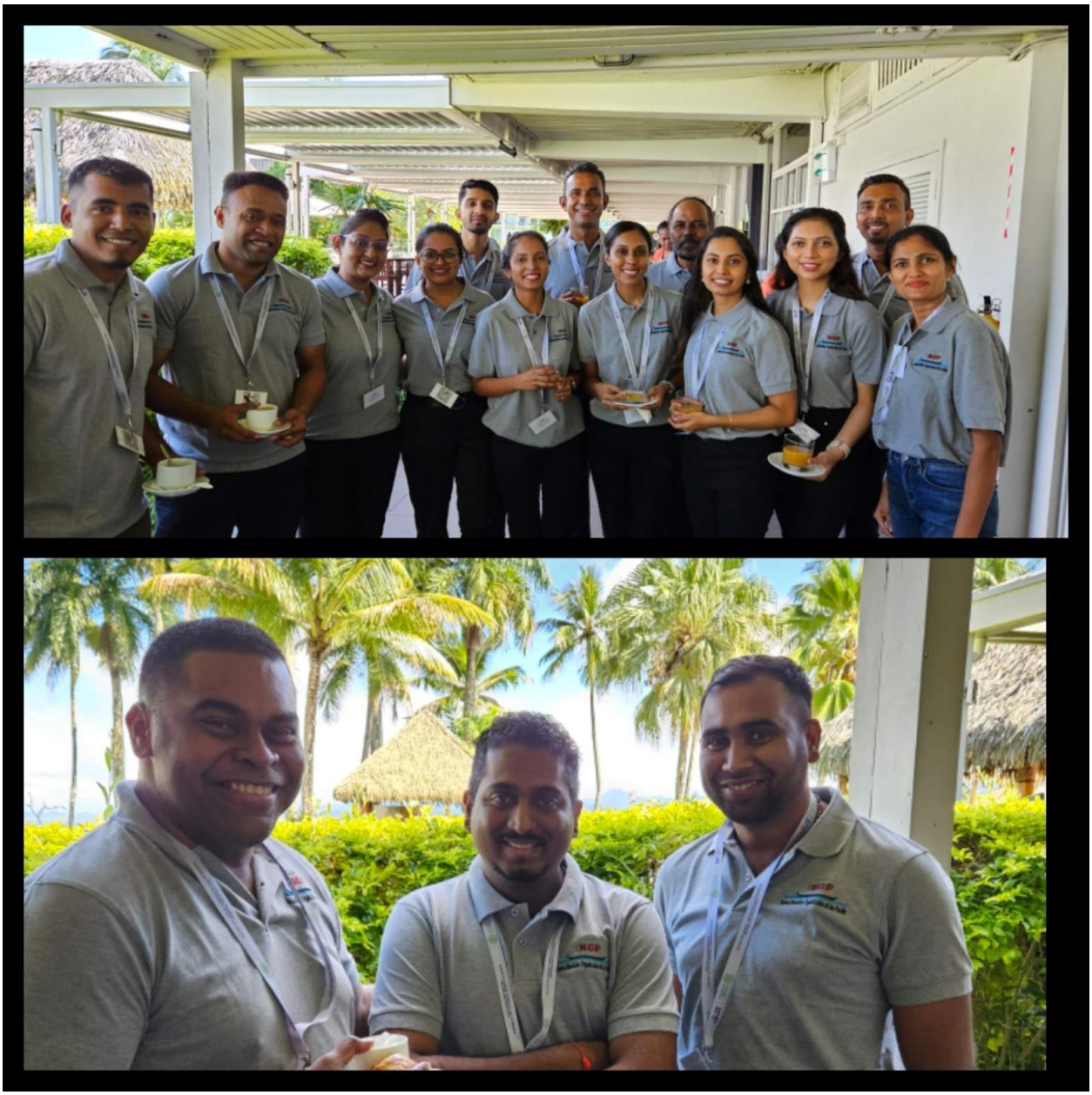


Antimicrobial resistance
& antibiotic prescribing patterns among
medical providers in Vanuatu.
New Zealand Medical Treatment Scheme
IMOP Conference