KHESAR GYALPO UNIVERSITY OF MEDICAL SCIENCES OF BHUTAN

Medical Education Centre for Research, Innovation & Training



10TH EDITION ◆ 26 – 28 NOVEMBER 2026

10th ICMH 2026

INTERNATIONAL CONFERENCE ON MEDICAL & HEALTH SCIENCES

BOOK OF ABSTRACTS

MAIN THEME

"Advancing Health and Medical Education for a Sustainable Future: Innovation, Prevention & Collaboration"

01 SUB-THEME	02 SUB-THEME	03 SUB-THEME	04 SUB-THEME
Health Workforce & Medical Education	Digital Health & AI in Healthcare	Lifestyle Modification for Health & Well-being	Planetary Health & Emerging Global Health Challenges

DATES	VENUE	ORGANISER
26 – 28 November 2026	Terma Linca Resort & Spa, Thimphu	KGUMSB

SUPPORTED BY

World Health Organization Bhutan · International Vaccine Institute · JICA · 40 JAPAN · BHUTAN ANNIVERSARY

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FOREWORD

Message from the President



PRESIDENT, KGUMSB

"Advancing Health and Medical Education for a Sustainable Future: Innovation, Prevention & Collaboration"

On behalf of the Khesar Gyalpo University of Medical Sciences of Bhutan, it is my privilege to welcome you to the **10th International Conference on Medical & Health Sciences (ICMH 2026)**, held from 26 to 28 November 2026 at Terma Linca Resort & Spa, South Babesa, Thimphu. Reaching its tenth edition, the conference reflects the University's enduring commitment to research, academic excellence and evidence-based health care for Bhutan and the region.

This year's theme, ***"Advancing Health and Medical Education for a Sustainable Future: Innovation, Prevention & Collaboration,"*** speaks directly to the challenges facing our health system. Its four sub-themes: Health Workforce & Medical Education; Digital Health & AI in Healthcare; Lifestyle Modification for Health & Well-being; and Planetary Health & Emerging Global Health Challenges, reflect priorities that will define the quality, equity and sustainability of care in the years ahead.

The three-day programme opens with parallel symposia on Respiratory Health, on Advancing Immunization & Disease Surveillance with the International Vaccine Institute, and on Digital Health, Biobank & Innovation with JICA. The main scientific sessions present research across all four sub-themes, together with a panel discussion on Ethics in Health Research, a symposium on Infections & Global Health, and a symposium on Pediatric Point-of-Care Ultrasound and Clinical Cases. The conference concludes with the closing keynote, "Building Resilient and Sustainable Health Systems for Bhutan: *Innovation, Prevention & Collaboration*," delivered by Dr. Pandup Tshering, Dean of the Faculty of Health Sciences, Royal Thimphu College.

I express my deep gratitude to His Excellency Lyonpo Tandin Wangchuk, Hon'ble Minister of Health, for gracing the conference as Chief Guest, and to the Ministry of Health for its continued support. I sincerely thank our partners – the World Health Organization, the International Vaccine Institute and the Japan International Cooperation Agency – in this special year marking 40 years of Japan–Bhutan friendship. My appreciation also goes to the Organising and Scientific Committees, our keynote and invited speakers, moderators, reviewers, judges, rapporteurs, and every presenter and participant, including time keepers and media.

May the 10th ICMH inspire meaningful dialogue, lasting collaboration and research that truly makes a difference to the health of our people. I wish you all a productive and memorable conference.

Pem Namgyal

TASHI DELEK!

Dr. Pem Namgyal (President, KGUMSB)

WELCOME TO THE 10TH ICMH

About the Conference

The 10th International Conference on Medical & Health Sciences (ICMH 2026) is organised by the Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB) through the Medical Education Centre for Research, Innovation and Training (MECRIT), and scheduled from 26 to 28 November 2026 at Terma Linca Resort & Spa, South Babesa, Thimphu.

Over three days, the conference brings together researchers, clinicians, educators, policymakers and students in two halls: the main scientific sessions on the four sub-themes in Main Hall-A, and four parallel symposia in Main Hall-A and Hall-B, together with a panel discussion and poster presentations, including medical expo.

The ICMH Series: A Decade of Research

Since its inception in 2016, the International Conference on Medical and Health Sciences (ICMH) has become a key platform for scientific exchange, collaboration and innovation in Bhutan. Across its editions, the conference has brought together researchers, academicians, clinicians, policymakers and health professionals to share evidence, discuss best practice and address pressing health challenges.

The 10th ICMH 2026 offers national and international participants the opportunity to engage with the latest developments in clinical medicine, public health, medical education and health systems research, and to build lasting networks and collaborative partnerships across institutions and countries.

The academic quality of the conference is safeguarded by its Scientific Committee, which reviews and selects abstracts for oral and poster presentation in line with the conference themes. Through a rigorous peer-review process, the Committee upholds scientific integrity and ensures that the work presented reflects high standards of research and scholarship in the medical and health sciences.

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26 – 28 NOVEMBER 2026

Programme at a Glance

TIME	SESSION	VENUE
DAY 1 Thursday, 26 November 2026		
0800–1030	Registration, Inaugural Ceremony & Inaugural Keynote Address	Main Hall-A
1100–1730	S1 · Symposium 1: Respiratory Health	Main Hall-A
1100–1700	S2 · Parallel Symposia 2: IVI – Advancing Immunization & Disease Surveillance; JICA – Digital Health, Biobank & Innovation	Hall-B
DAY 2 Friday, 27 November 2026		
0900–0940	MS · Main Scientific Session – Opening: Keynote & Address	Main Hall-A
0940–1150	MS1 · Sub-Theme 1: Health Workforce & Medical Education	Main Hall-A
1150–1440	MS2 · Sub-Theme 2: Digital Health & AI in Healthcare	Main Hall-A
1440–1700	MS-IVD · Panel Discussion: Ethics in Health Research; Poster Presentations (from 1600)	Main Hall-A
0900–1300	S3 · Parallel Symposium 3: Infections & Global Health	Hall-B
DAY 3 Saturday, 28 November 2026		
0900–1300	S4 · Parallel Symposia 4: Pediatric POCUS & Clinical Cases	Hall-B
0900–1125	MS3 · Sub-Theme 3: Lifestyle Modification for Health & Well-being	Main Hall-A
1125–1305	MS4 · Sub-Theme 4: Planetary Health & Emerging Global Health Challenges	Main Hall-A
1400–1540	CS · Closing & Valedictory Session: Closing Keynote, Conference Summary & Best Presenter Awards	Main Hall-A

Source: 10th ICMH 2026 Tentative Agenda v1.5 (18-11-2026). Times are subject to change; please follow announcements by the MC.

How to Read this Book

S1-IA.1 Session code as in the agenda: S1–S4 = Symposia 1–4; MS = Main Scientific Session; MS1–MS4 = Sub-Themes 1–4; MS-IVD = Panel Discussion; CS = Closing Session; P = Poster. The Roman numeral and letter give the session (IA = Session A, IIB = Session B …); the last number is the order of presentation.

MS1-IIB.0 Gold code = keynote, address or invited speaker (.0 = invited speaker of the session).

Author Bold and underlined = presenting author; * = corresponding author.

[Virtual] Online presentation.

Entries Symposium talks, keynotes and invited speakers: presenter profile. Main Scientific Sessions and posters: structured abstract.

Side tabs Coloured tabs on the page edge mark each section (KEY, S1–S4, MS1–MS4, PANEL, POSTER, ANNEX).

KEY

PLENARY

Keynote & Plenary Addresses

◆ Main Hall-A & Hall-B · 26–28 November 2026

DAY 1 · INAUGURAL CEREMONY

Inaugural Keynote

KEYNOTE INAUGURAL KEYNOTE 0940–0950 · Main Hall-A

Inaugural Ceremony - Keynote Address

Dr. Bhupinder Kaur Aulakh[1]

[1]WHO Representative, WHO Country Office, Thimphu, Bhutan

Speaker profile: Dr. Bhupinder Kaur Aulakh has been the WHO Representative to Bhutan since August 2023, with over 25 years of experience in public health and administration. A medical doctor, she holds a Master of Public Health from Harvard School of Public Health, where she was a Presidential Scholar. Previously, she served as Executive Officer to the WHO Regional Director for South-East Asia, Deputy WHO Representative to Bangladesh, and Technical Officer at WHO Headquarters, Geneva. As an Indian Administrative Service officer, she served as Secretary of Health in Uttarakhand, India, and received the Chief Minister's Award for Best Secretary in 2020.

DAY 1 · IVI SYMPOSIUM · HALL-B

Session A: IVI Symposium Keynote

S2-IA.1 KEYNOTE 1100–1115 · Hall-B

IVI Symposium - Keynote Address

Prof. Florian Marks[1]

[1]Deputy Director General & Co-Director, Hong Kong Jockey Club Global Health Institute, EPIC, International Vaccine Institute (IVI), South Korea

Speaker profile: Prof. Florian Marks is Deputy Director General of the Epidemiology, Public Health and Impact (EPIC) unit at the International Vaccine Institute (IVI), Seoul, and a Co-Director of the Hong Kong Jockey Club Global Health Institute. Trained in pharmacy, he completed his doctorate in malaria epidemiology at the Bernhard Nocht Institute for Tropical Medicine, Hamburg, and holds an MPH from the London School of Hygiene and Tropical Medicine. Since joining IVI in 2006, he has led large multi-centre programmes, including the Typhoid Fever Surveillance in Africa Program (TSAP) and the Severe Typhoid in Africa Program (SETA), whose data supported the inclusion of typhoid conjugate vaccines in the Gavi portfolio. He is a Principal Research Associate at the University of Cambridge and an Adjunct Professor at the University of Antananarivo/Madagascar Institute for Vaccine Research.

DAY 2 · MAIN SCIENTIFIC SESSION – OPENING

Session A: Opening

MS-IA.1 KEYNOTE 0900–0920 · Main Hall-A

Main Scientific Session - Keynote Address

Dr. Pem Namgyal[1]

[1]President, Khesar Gyalpo University of Medical Sciences of Bhutan, Bhutan

Speaker profile: Dr. Pem Namgyal is the President of the Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB) and the Jigme Dorji Wangchuck National Referral Hospital (JDWNRH). He was appointed on 13 August 2025 as the University's second President. An epidemiologist and public health specialist, he brings over 30 years of experience in the health sector, including 22 years with the World Health Organization. He held senior leadership roles at WHO

KEY

Headquarters in Geneva and at the WHO Regional Office for South-East Asia, most recently as Director of Programme Management. His work has focused on strengthening health systems and disease control programmes and on promoting equitable access to health services.

MS-IA.2 **ADDRESS** 0920–0940 · Main Hall-A

Keynote Address - Migraine and Opthalmoplegic Migraine: *Diagnosis and Management*

Dr. Vivek Lal[1]
[1]Director, PGIMER, India

Speaker profile: Prof. Vivek Lal is the Director of the Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India, a post he has held since May 2022. An internationally renowned neurologist, he completed his MBBS at Guru Nanak Dev University, Amritsar, and his MD and DM (Neurology) at PGIMER. He is also a Fellow of the Royal College of Physicians, Edinburgh. He joined PGIMER as Assistant Professor in 1994 and headed its Department of Neurology from 2014. He is known for his research on neuro-ophthalmology, particularly inflammatory disorders of the optic nerve, and has around 170 publications in peer-reviewed journals and book chapters.

DAY 1 · JICA SYMPOSIUM · HALL-B

Session B: JICA Symposium on Digital Health, Biobank & Innovation – Bhutan's Vision for Digital Health Transformation [40 mins]

Chairperson: Mr. Shotaro Togawa, Japan International Cooperation Agency (JICA), Japan

S2-IIB.0 **OPENING REMARKS** 1400–1405 · Hall-B

JICA Symposium – Opening Remarks

Dasho Pemba Wangchuk[1]
[1]Secretary, Ministry of Health (MoH), Bhutan

Speaker profile: Dasho Pemba Wangchuk is the Secretary of the Ministry of Health, Royal Government of Bhutan. His Majesty The King granted him dhar as Health Secretary in February 2024, after he had served as Acting Secretary and Director General of the Department of Traditional Medicine. A senior civil servant with wide administrative experience, Dasho previously served as Director General of the Road Safety and Transport Authority (RSTA), as Dzongdag of Chhukha, Tsirang and Haa, and as Deputy Secretary of the Ministry's Policy and Planning Division. As Secretary, he oversees the Ministry's administration and national health programmes.

DAY 3 · CLOSING & VALEDICTORY SESSION

Session A: Closing Keynote

CS-IA.1 **CLOSING KEYNOTE** 1400–1420 · Main Hall-A

Closing Keynote Address - Building Resilient and Sustainable Health Systems for Bhutan: *Innovation, Prevention & Collaboration*

Dr. Pandup Tshering[1]
[1]Dean of Faculty of Health Sciences, Royal Thimphu College (RTC), Bhutan

Speaker profile: Dr. Pandup Tshering is the Dean of the Faculty of Health Sciences at Royal Thimphu College (RTC). He holds an MBBS, a Master of Public Health and a Postgraduate Diploma in Dermatology. Across three decades, he has served as Health Secretary of the Ministry of Health, Director General of Medical Services and Director of the Department of Public Health, and as a Professor at KGUMSB's Faculty of Undergraduate Medicine. His expertise spans health governance, planning and primary health care.

S1

DAY 1 · SYMPOSIUM 1 · MAIN HALL-A

Symposium on Respiratory Health

◆ **Thursday, 26 November 2026 · 1100–1730 Hrs · Main Hall-A**

SESSION A · 2 HRS

Moderators: Prof. Ee Ming Khoo, Professor, Universiti Malaya (UM) (Chair) & Dr. Pema Tenzing, Commandant, RBA Hospital (Co-chair)

S1-IA.1 **SYMPOSIUM TALK** 1100–1120 · Main Hall-A

RESPIRE Global Health Unit in Respiratory Health – Applied Health Research across 7 Asian Countries

Prof. Harry Campbell[1]

[1]Professor, University of Edinburgh, UK

Speaker profile: Prof. Harry Campbell is Professor of Genetic Epidemiology and Public Health at the Usher Institute, University of Edinburgh, and an honorary consultant in public health at NHS Lothian. A Fellow of the Royal Society of Edinburgh and the Academy of Medical Sciences, he previously served as Deputy Director of the Usher Institute and Joint Director of its Centre for Global Health Research. He is Co-Editor-in-Chief of the Journal of Global Health. His research spans global child health, respiratory infections, and genetic epidemiology.

S1-IA.2 **SYMPOSIUM TALK** 1120–1140 · Main Hall-A

Lancet Global Health Commission on Increasing Access to Medical Oxygen

Dr. Ahmed Ehsanur Rahman[1]

[1]Scientist, icddr,b, Bangladesh

Speaker profile: Dr. Ahmed Ehsanur Rahman is a Scientist in the Maternal and Child Health Division at icddr,b, Bangladesh. A medical graduate of Dhaka Medical College, he holds an MPH from BRAC University and a PhD in Global Health from the University of Edinburgh. His research focuses on maternal, newborn and child health, health systems strengthening, and implementation science. He serves on the Executive Committee of the Lancet Global Health Commission on Medical Oxygen Security and on several Bangladesh national technical committees.

S1-IA.3 **SYMPOSIUM TALK** 1140–1200 · Main Hall-A

RESPIRE Bhutan Oxygen Security Survey

Dr. Mimi Lhamu Mynak[1]

[1]President (Pediatrician), National Medical Services (NMS), Bhutan

Speaker profile: Dr. Mimi Lhamu Mynak is the President of the National Medical Services (NMS), Royal Government of Bhutan. A pediatrician by training, she has served at the Jigme Dorji Wangchuck National Referral Hospital, Bhutan's main referral and teaching hospital. She is Vice Chair of Bhutan's National Immunization Technical Advisory Group (NITAG) and a member of the WHO South-East Asia Regional Immunization Technical Advisory Group (SEAR-RITAG). She is a strong advocate for quality maternal, neonatal and child health services in Bhutan.

S1-IA.4 **SYMPOSIUM TALK** 1200–1220 · Main Hall-A

RSV Global Burden of Disease and Immunisation Strategies

Prof. Harish Nair[1]

[1]Professor, University of Edinburgh, UK

Speaker profile: Prof. Harish Nair is Professor of Paediatric Infectious Diseases and Global Health and Co-Head of the Centre for Global Health at the Usher Institute, University of Edinburgh. Trained in clinical paediatrics and epidemiology, he holds an MBBS from Maulana Azad Medical College, Delhi, and a PhD from Edinburgh. He leads the

Respiratory Viral Epidemiology research programme, with a focus on child pneumonia and RSV. He chairs the External Advisory Group for WHO's Global RSV Surveillance Programme.

S1-IA.5 **SYMPOSIUM TALK** 1220–1240 · Main Hall-A

RSV Surveillance in Bhutan

Mr. Kunzang Dorji[1]

[1]Dy. Chief Laboratory Officer, RCDC, Ministry of Health (MoH), Bhutan

Speaker profile: Mr. Kunzang Dorji is a Deputy Chief Laboratory Officer and Surveillance Officer at the Royal Centre for Disease Control (RCDC), Department of Public Health, Ministry of Health, Bhutan. RCDC serves as Bhutan's national public health reference laboratory. His work spans laboratory-based disease surveillance and diagnostics. During the COVID-19 pandemic he contributed to the national RT-PCR testing response, co-authoring a study on sample pooling strategies for SARS-CoV-2 detection in Thimphu.

S1-IA.6 **SYMPOSIUM TALK** 1240–1300 · Main Hall-A

RSV Immunisation Acceptability Studies

Dr. Girish Dayma[1]

[1]Sr. Researcher, KEM Hospital Research Centre, India

Speaker profile: Dr. Girish Dayma is a Senior Research Scientist at KEM Hospital Research Centre, Pune, India, with over 13 years of experience in public health and clinical research in maternal and child health and infectious diseases. He joined KEM in 2009, working on large community-based vaccine trials funded by WHO, PATH and the Gates Foundation. He holds a BAMS, a PG Diploma in Clinical Research, and a Master of Global Health from the University of Barcelona. He is also a RESPIRE-ISARIC Fellow with the University of Edinburgh.

SESSION B · 1 HR 20 MINS

Moderators: Mr. Karma Jamtsho, Director, Dept. of Public Health (DoPH), MoH (Chair) & Prof. Ee Ming Khoo, UM (Co-chair)

S1-IIB.1 **SYMPOSIUM TALK** 1400–1420 · Main Hall-A

KAP Influenza Vaccine Study in Bhutan

Ms. Cheten Zangmo[1]

[1]Program Officer, DoPH, MoH, Bhutan

Speaker profile: Ms. Cheten Zangmo is a Program Officer with the Vaccine Preventable Disease Program, Department of Public Health, Ministry of Health, Bhutan, where she has served since 2022. A graduate of the Asian University for Women, she works on strengthening Bhutan's national immunization programme. Her research interests include health workers' knowledge and practices on vaccination, influenza vaccine cost-benefit analysis, vaccine acceptance and uptake, cold chain capacity, and the impact of HPV vaccination on cervical cancer.

S1-IIB.2 **SYMPOSIUM TALK** 1420–1440 · Main Hall-A

Bhutan Chronic Respiratory Diseases Survey

Dr. Thinley Dorji[1]

[1]Medical Specialist, Central Regional Referral Hospital (CRRH), Gelephu, Bhutan

Speaker profile: Dr. Thinley Dorji is a Medical Specialist in the Department of Internal Medicine at the Central Regional Referral Hospital (CRRH), Gelephu, Bhutan, and is affiliated with the Faculty of Postgraduate Medicine, KGUMSB. He completed his MBBS at the University of Colombo, Sri Lanka, and his MD in Internal Medicine at the Armed Forces Medical College, India. He is an active clinical researcher whose work spans internal medicine, infectious diseases, cervical cancer screening, and traditional medicine services in Bhutan.

S1-IIB.3 SYMPOSIUM TALK 1440–1500 · Main Hall-A

RESPIRE CRD Initiatives and PURE Trial

Prof. Hilary Pinnock[1]

[1]Professor, University of Edinburgh, UK

Speaker profile: Prof. Hilary Pinnock is Professor of Primary Care Respiratory Medicine at the Usher Institute, University of Edinburgh, where she has worked since 2004. A family doctor by background, she leads research on improving care for people with asthma and COPD, with expertise in health services research and implementation science. She co-leads the Non-Communicable Diseases programme of the NIHR RESPIRE Global Health Research Unit and chairs the Education Council of the European Respiratory Society.

S1-IIB.4 SYMPOSIUM TALK 1500–1520 · Main Hall-A

CRD Patient Pathways

Dr. Hani Salim[1]

[1]Senior Lecturer, Universiti Putra Malaysia, Malaysia

Speaker profile: Dr. Hani Salim is a Senior Lecturer and family medicine specialist at Universiti Putra Malaysia (UPM), where she has been a faculty member since 2015. A family physician with over a decade of experience in Malaysian primary care, she completed her PhD at the University of Edinburgh as a RESPIRE scholar. Her research focuses on health literacy and asthma self-management, including the development of a digital self-management app for adults with limited health literacy.

SESSION C · 1 HR 30 MINS

Moderators: Prof. Hilary Pinnock, Professor, University of Edinburgh (UoE) (Chair) & Dr. Mimi Lhamu Mynak, President & Pediatrician, NMS, JDWNRH (Co-chair)

S1-IIIC.1 SYMPOSIUM TALK 1600–1615 · Main Hall-A

Global Perspectives on Delivery of Pulmonary Rehabilitation

Dr. Soo Chin Chan[1]

[1]Associate Professor, Universiti Malaya, Malaysia

Speaker profile: Dr. Soo Chin Chan is an Associate Professor and Rehabilitation Medicine specialist at Universiti Malaya, Malaysia. She earned her medical degree from the International Medical University and her Master's in Rehabilitation Medicine from Universiti Malaya, and served in Ministry of Health hospitals before joining academia. Her research focuses on strengthening pulmonary rehabilitation services across Asia, particularly in low- and middle-income countries. She serves on the WHO expert panel for the COPD rehabilitation framework.

S1-IIIC.2 SYMPOSIUM TALK 1615–1630 · Main Hall-A

Bhutan Pulmonary Rehabilitation Feasibility Study

Dr. Mimi Lhamu Mynak[1]

[1]Pediatrician, NMS, Bhutan

Speaker profile: *[See speaker profile under Session: S1-IA.3]*

S1-IIIC.3 PANEL DISCUSSION 1630–1700 · Main Hall-A

Panel Discussion: How to Develop a Sustainable Pulmonary Rehabilitation Service in Bhutan?

Dr. Soo Chin Chan[1]

[1]Associate Professor, Universiti Malaya, Malaysia

Speaker profile: *[See speaker profile under Session: S1-IIIC.1]*

S1

S1-IIIC.4 **SYMPOSIUM TALK** 1700–1715 · Main Hall-A

WHO and Respiratory Health in Bhutan

Dr. Bhupinder Kaur Aulakh[1]

[1]WHO Representative, WHO Country Office, Bhutan

Speaker profile: Dr. Bhupinder Kaur Aulakh has been the WHO Representative to Bhutan since August 2023, with over 25 years of experience in public health and administration. A medical doctor, she holds a Master of Public Health from Harvard School of Public Health, where she was a Presidential Scholar. Previously, she served as Executive Officer to the WHO Regional Director for South-East Asia, Deputy WHO Representative to Bangladesh, and Technical Officer at WHO Headquarters, Geneva. As an Indian Administrative Service officer, she served as Secretary of Health in Uttarakhand, India, and received the Chief Minister's Award for Best Secretary in 2020.

S2

DAY 1 · PARALLEL SYMPOSIA 2 · HALL-B

Advancing Immunization & Disease Surveillance (IVI) and Digital Health, Biobank & Innovation (JICA)

◆ **Thursday, 26 November 2026 · 1100–1700 Hrs · Hall-B**

SESSION A · IVI SYMPOSIUM · 1 HR 40 MINS

Advancing Immunization & Disease Surveillance: Integrating RWE, Genomics and Field Implementation

Moderator: Dr. Dorji Tshering, Chief Medical Officer, Phuentsholing General Hospital, NMS, MoH (Chair)

S2-IA.1 **KEYNOTE** 1100–1115 · Hall-B

IVI Symposium - Keynote Address

Prof. Florian Marks[1]

[1]Deputy Director General & Co-Director, Hong Kong Jockey Club Global Health Institute, EPIC, International Vaccine Institute (IVI), South Korea

Speaker profile: Prof. Florian Marks is Deputy Director General of the Epidemiology, Public Health and Impact (EPIC) unit at the International Vaccine Institute (IVI), Seoul, and a Co-Director of the Hong Kong Jockey Club Global Health Institute. Trained in pharmacy, he completed his doctorate in malaria epidemiology at the Bernhard Nocht Institute for Tropical Medicine, Hamburg, and holds an MPH from the London School of Hygiene and Tropical Medicine. Since joining IVI in 2006, he has led large multi-centre programmes, including the Typhoid Fever Surveillance in Africa Program (TSAP) and the Severe Typhoid in Africa Program (SETA), whose data supported the inclusion of typhoid conjugate vaccines in the Gavi portfolio. He is a Principal Research Associate at the University of Cambridge and an Adjunct Professor at the University of Antananarivo/Madagascar Institute for Vaccine Research.

S2-IA.2 **SYMPOSIUM TALK** 1115–1130 · Hall-B

Therapeutics in a Pandemic Setting: From Strategy to Implementation

Prof. Duncan Richards[1]

[1]Head, Department of Medicine (DM, FRCP), University of Cambridge, UK

Speaker profile: Prof. Duncan Richards is Professor of Medicine and Head of the Department of Medicine at the University of Cambridge. A clinical pharmacologist, he spent nearly 20 years at GSK, latterly as Head of Clinical Pharmacology and Experimental Medicine. From 2019 he was Climax Professor of Clinical Therapeutics at Oxford, directing the Oxford Clinical Trials Research Unit. He was a core member of the UK COVID-19 Therapeutics Advisory Panel, and his research focuses on accelerating new drug treatments through early-phase trials.

S2-IA.3 **SYMPOSIUM TALK** 1130–1145 · Hall-B

Immunisation: Past, Present and Future

Prof. Maheshi Ramasamy[1]

[1]Professor (MBChB, DPhil, FRCP), University of Oxford, UK

Speaker profile: Prof. Maheshi Ramasamy is Professor of Infection and Vaccinology at the University of Oxford and a Principal Investigator at the Oxford Vaccine Group, where she leads early- and late-phase adult vaccine trials, with a focus on enteric infections. She trained in medicine at Christ's College, Cambridge, and obtained her DPhil at Wadham College, Oxford. She is a Consultant Physician at Oxford University Hospitals NHS Foundation Trust, Deputy Director of Graduate Entry Medicine, and a member of the UK NITAG.

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S2-IA.4 **SYMPOSIUM TALK** 1145–1200 · Hall-B

Real World Evidence Informing Public Health Policies

Dr. Birkneh Tadesse[1]

[1]Associate Director General, IVI, South Korea

Speaker profile: Dr. Birkneh Tadesse, MD, PhD, is Associate Director General and Head of Real-World Evidence in the Epidemiology, Public Health and Impact (EPIC) unit of the International Vaccine Institute (IVI), Seoul. A physician–scientist, he joined IVI in 2019 as a Research Scientist and led early-stage clinical trials of the Vi-DT typhoid conjugate vaccine. He previously served as Associate Professor and Chair of the Department of Pediatrics, and is affiliated with Karolinska Institutet's Department of Global Public Health.

S2-IA.5 **SYMPOSIUM TALK** 1200–1215 · Hall-B

Genomics, AMR Tracking and Affordable Sequencing

Prof. Gordon Dougan[1]

[1]President, UK Microbiology Society; University of Cambridge, UK

Speaker profile: Prof. Gordon Dougan CBE FRS FMedSci is a microbiologist and genome scientist in the Department of Medicine, University of Cambridge, and has been President of the Microbiology Society since January 2025. Formerly Head of Pathogen Research at the Wellcome Sanger Institute, he is a world authority on vaccines, genomics and antimicrobial resistance, and helped establish the typhoid human challenge model with Oxford colleagues. He received the Albert B. Sabin Gold Medal for his work in vaccinology and advises WHO.

S2-IA.6 **SYMPOSIUM TALK** 1215–1230 · Hall-B

Field Research in Resource-Limited Settings

Prof. Raphaël Rakotozandrindrainy[1]

[1]Head, Madagascar Institute for Vaccine Research (MIVR), University of Antananarivo (UoA), Madagascar

Speaker profile: Prof. Raphaël Rakotozandrindrainy heads the Madagascar Institute for Vaccine Research (MIVR), the University of Antananarivo–IVI Collaborating Centre opened in December 2021 to build a centre of excellence for vaccine research and clinical trials. MIVR hosts collaborative programmes with IVI, including typhoid conjugate vaccine effectiveness studies and the VASA schistosomiasis vaccine trial, and opened a research site in Ambositra in 2024. His research spans typhoid fever, schistosomiasis, leptospirosis and other neglected, vaccine-preventable diseases.

S2-IA.7 **SYMPOSIUM TALK** 1230–1245 · Hall-B

Integrating Clinical AMR Surveillance with Whole Genome Sequencing

Dr. Camille Dauvergne[1]

[1]Associate Research Scientist, IVI, South Korea

Speaker profile: Dr. Camille Dauvergne is an Associate Research Scientist in the Epidemiology, Public Health and Impact (EPIC) unit of the International Vaccine Institute (IVI), Seoul. Her research focuses on antimicrobial resistance in Southeast Asia, capacity-building for research preparedness and regulatory support, and vaccine effectiveness studies for cholera and malaria in Africa. She holds a Doctorate in Pharmacy from Paris-Saclay University and an MSc in International Health Policy from the London School of Economics, and has worked with the European Medicines Agency.

SESSION B · JICA SYMPOSIUM · 40 MINS

Digital Health, Biobank & Innovation – Bhutan's Vision for Digital Health Transformation

Chairperson: Mr. Shotaro Togawa, Japan International Cooperation Agency (JICA), Japan

S2-IIB.0 **OPENING REMARKS** 1400–1405 · Hall-B

Dasho Pemba Wangchuk

Secretary, MoH

Speaker profile: Dasho Pemba Wangchuk is the Secretary of the Ministry of Health, Royal Government of Bhutan. His Majesty The King granted him dhar as Health Secretary in February 2024, after he had served as Acting Secretary and Director General of the

Department of Traditional Medicine. A senior civil servant with wide administrative experience, Dasho previously served as Director General of the Road Safety and Transport Authority (RSTA), as Dzongdag of Chhukha, Tsirang and Haa, and as Deputy Secretary of the Ministry's Policy and Planning Division. As Secretary, he oversees the Ministry's administration and national health programmes.

S2-IIB.1 **SYMPOSIUM TALK** 1405–1415 · Hall-B

National Digital Health Strategy and Bhutan's Vision for Future Healthcare Transformation

Dr. Mongal Singh Gurung[1]

[1]Principal Research Officer, Health Informatics & Research Division (HIRD), MoH, Bhutan

Speaker profile: Dr. Mongal Singh Gurung is Principal Research Officer in the Health Informatics & Research Division (HIRD), Ministry of Health, Bhutan. He joined the Ministry's Health Research and Epidemiology Unit in 2010 and headed it from 2015. Trained in life sciences, public administration and medical statistics, he has contributed to national surveys on chronic respiratory diseases and disability, research on Bhutan's ethics review system, and the national digital health and research governance agenda.

S2-IIB.2 **SYMPOSIUM TALK** 1415–1425 · Hall-B

Four Banks Project: Progress, Lessons Learned and Future Opportunities

Ms. Tashi Choden[1]

[1]Project Manager, Digital Service Operations & Maintenance, Government Technology Agency (GovTech), Bhutan

Speaker profile: Ms. Tashi Choden is Project Manager with the Digital Service Operations & Maintenance team of the Government Technology Agency (GovTech), Bhutan. She is engaged in the Four Banks Project, formally the "Project for Strengthening Government Capacity for Using Digital Technology and Data", implemented by GovTech and the Ministry of Health with JICA support. The project is upgrading the Electronic Patient Information System and developing health, bio and household data banks linked to Bhutan's National Digital ID for care and research.

S2-IIB.3 **SYMPOSIUM TALK** 1425–1430 · Hall-B

Bhutan–JICA Cooperation in Health and Digital Transformation

Mr. Norio Kasahara[1]

[1]Senior Advisor of Health, JICA, Japan

Speaker profile: Mr. Norio Kasahara is Senior Advisor of Health at the Japan International Cooperation Agency (JICA), Japan, providing technical guidance on JICA's health cooperation with partner countries. JICA's health work aims to achieve more resilient, equitable and sustainable universal health coverage through stronger health systems, including health information. In Bhutan, JICA supports the Ministry of Health and GovTech Agency to integrate four health data banks with the National Digital ID, advancing digital transformation of the health sector.

SESSION C · 40 MINS

Japan's Experience in Biobank and Health Data Ecosystems – Tohoku Medical Megabank Organization (ToMMo)

Chairperson: Mr. Shotaro Togawa, JICA, Japan

S2-IIIC.1 **SYMPOSIUM TALK** 1440–1450 · Hall-B

Building Tohoku Medical Megabank Organization (ToMMo): History, Vision and Health Data Utilization Ecosystem

Prof. Fuji Nagami[1]

[1]Professor, Tohoku University, Japan

Speaker profile: Prof. Fuji Nagami is Professor and Deputy Department Chair of Public Relations and Planning at the Tohoku Medical Megabank Organization (ToMMo), Tohoku University, leading public relations and external engagement. A science communication specialist who completed doctoral studies at the University of Tokyo, Prof. Nagami has been with ToMMo since 2012. Prof. Nagami's research focuses on science communication, patient and public involvement and the ethics of genome

medicine, including the return of individual genomic results.

S2-IIIC.2 **SYMPOSIUM TALK** 1450–1500 · Hall-B

Participant Recruitment and the Three-Generation Cohort Study

Prof. Taku Obara[1]
[1]Professor, Tohoku University, Japan

Speaker profile: Prof. Taku Obara is Professor of Clinical Epidemiology at the Tohoku Medical Megabank Organization (ToMMo), Tohoku University, which runs the TMM Birth and Three-Generation (BirThree) Cohort Study of over 73,000 pregnant women and family members. A pharmacoepidemiologist with a PhD in medical pharmacy from Tohoku University, Prof. Obara researches perinatal epidemiology, medication use in pregnancy and real-world data. Prof. Obara's laboratory promotes the BirThree cohort as a multigenerational platform for life-course research.

S2-IIIC.3 **SYMPOSIUM TALK** 1500–1510 · Hall-B

Development and Operation of Integrated Research Databases

Prof. Soichi Ogishima[1]
[1]Professor, Tohoku University, Japan

Speaker profile: Prof. Soichi Ogishima, MD, PhD, is Professor and Chair of the Department of Informatics for Genomic Medicine at the Tohoku Medical Megabank Organization (ToMMo), Tohoku University, and leads the Clinical Database Integration Group at the Advanced Research Center for Innovations in Next-Generation Medicine (INGEM). A translational bioinformatician trained in mathematical engineering at the University of Tokyo, he heads development of dbTMM, which integrates genomic, omics, health and clinical data from the Tohoku Medical Megabank cohorts.

SESSION D · INTERACTIVE SESSION · 45 MINS

Building the Future of Health and Well-being in Bhutan – What's Next after Digital Health Infrastructure?

Moderator: Mr. Atsushi Yamanaka, Senior Advisor of Digital Transformation, JICA, Japan

S2-IVD.1 **SYMPOSIUM TALK** 1600–1607 · Hall-B

Future Research Opportunities Leveraging Health Data and the Upcoming Medical Biobank

Dr. Jigme Yoezer[1]
[1]Focal, Digital Health & Innovation Unit, DHIU-GMC & Medical Officer, CRRH, Bhutan

Speaker profile: Dr. Jigme Yoezer is a Medical Officer at the Central Regional Referral Hospital (CRRH), Gelephu, and the Focal Person for the Digital Health & Innovation Unit (DHIU-GMC). Dr. Yoezer leads the unit's work on bringing specialist care closer to patients through digital tools, including a rheumatology teleconsultation service in Gelephu that links remote specialists with local patients. Interests include telemedicine, health data use and digital health innovation for Bhutan.

S2-IVD.2 **SYMPOSIUM TALK** 1607–1614 · Hall-B

Data Governance and Cybersecurity: Key Considerations for Promoting Secondary Use

Mr. Atsushi Yamanaka[1]
[1]Senior Advisor of Digital Transformation, JICA, Japan

Speaker profile: Mr. Atsushi Yamanaka is Senior Advisor for Digital Transformation at the Office of Science, Technology and Innovation & Digital Transformation (STI/DX), Japan International Cooperation Agency (JICA). With over 30 years of global experience in ICT for development, he has worked with UN agencies, the private sector and civil society in over 100 countries. He also spent over a decade in Rwanda as Senior Advisor to the Government.

S2-IVD.3 **CLOSING REMARKS** 1645–1650 · Hall-B

Dasho Pemba Wangchuk, Secretary, MoH *[See speaker profile under Session: S2-IIB.0]*

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DAY 2 · MAIN SCIENTIFIC SESSION · SUB-THEME 1

Health Workforce & Medical Education

◆ **Friday, 27 November 2026 · Session B · Main Hall-A**

SESSION B · 1 HR 40 MINS

Moderators: Dr. Tashi Tenzin, Consultant Neurosurgeon, JDWNRH (Chair) & Mr. Nima Sangay, Dean, FNPH, KGUMSB (Co-chair)

MS1-IIB.0 INVITED SPEAKER 0940–1000 · Main Hall-A

[Invited Talk – Sub-Theme 1]

Lyonpo Thakur S Powdyel[1]

[1]Former Education Minister, Bhutan

Speaker profile: Gusi Peace Laureate, Bhutan's former Minister of Education, Professor Thakur S Powdyel, is a lifetime educator with particular interest in education as the noble sector of public good, gross national happiness, institutional integrity and national self-respect. Translated into some 21 major languages around the world, his little book, My Green School: An Outline for Human and Societal Flourishing, has been hailed as an outstanding contribution to global education thought. As a holistic development thinker, Professor Powdyel reflects on the outer and inner life of institutions and nations and believes that with all its imperfections, the world is still a good place – worth-caring for, worth-improving, and worth-celebrating. An abiding quest for harmony and plea for a union of role and soul have defined his life and work. Inducted into the celebrated Marianense Academy of Letters in Brazil, Professor Powdyel has advanced goodwill and human relationships amongst diverse peoples and societies at home and beyond in a lifelong search for a better world and a healthier planet. Deeply rooted in his beloved Druk Yul and tested on the sensibilities of a global citizen, here is an old faithful still at work, still building his nation – in honour of Life and pride in service.

MS1-IIB.1 ORAL PRESENTATION 1000–1015 · Main Hall-A

Reducing Medication Prescription Errors at Eastern Regional Referral Hospital, Mongar, Bhutan, 2026: A Quality Improvement Project

Dr. Yeshey Dorjey[1*]

[1]Eastern Regional Referral Hospital, National Medical Services (NMS), Mongar, Bhutan

**Corresponding author*: yesheydorjey@gmail.com

Background: Medication prescription errors are a major preventable cause of patient harm, contributing to over half of medication-related harm globally. Eastern Regional Referral Hospital, a tertiary centre serving Bhutan's eastern region, uses an electronic prescribing system (e-PIS); however, high patient complexity and workload may elevate prescription error risk.

Objective/s: To reduce prescription error rate by 50% from baseline within nine weeks.

Method/s: This project applied Plan-Do-Study-Act methodology. Baseline error prevalence was assessed over two weeks using a structured audit checklist via REDCap, covering all OPD and IPD e-PIS prescriptions. A multidisciplinary team conducted fishbone analysis to identify root causes, informing two sequential PDSA cycles of targeted interventions. Error rate was defined as the proportion of audited prescriptions with at least one error, tracked weekly via run chart against a baseline average and target line.

Results: Baseline audit identified a prescription error rate of 6.1% (123/2,013 prescriptions). Following two sequential PDSA cycles, the rate declined to 2.5% (75/2984), an absolute reduction of 3.6% percent (95% CI: 2.4–4.8) and a relative reduction of 58.9% ($\chi^2 = 40.87$, df = 1, $p < 0.001$), exceeding the pre-specified 50% target.

Conclusion/s: Two sequential, targeted PDSA cycles achieved a statistically significant and clinically meaningful reduction in prescription

errors at ERRH. These findings support structured, audit-driven PDSA methodology as a scalable model for medication safety improvement in resource-limited referral hospital settings.

Keywords: *Medication safety; Prescription errors; Quality improvement; PDSA; Bhutan*

MS1-IIB.2 **ORAL PRESENTATION** 1015–1030 · Main Hall-A

Audit on Surgical Resection Margin and Surgical-Site Infection from a Peripheral Onco-Surgical Centre in Sri Lanka *[Virtual]*

Dr. Sampath Herath[1*] *& Niroshan Atulugama; Chathuri Udeshika Goonetilleke*[1]

[1]Ministry of Health, Sri Lanka

**Corresponding author:* hmshirantha@gmail.com

Background: Negative resection margins (R0) and low surgical-site infection (SSI) rates are established quality indicators in breast cancer surgery. Margin positivity is typically targeted below 5–10%, and SSI rates of 3–5% are cited as acceptable benchmarks (NICE / ACS-NSQIP data) for clean breast procedures.

Objective/s: To audit the quality of breast cancer surgery at a tertiary-care peripheral surgical oncology unit in Sri Lanka against international benchmarks. Specifically, to determine the proportion of surgical resection margins that were positive (R1) and the rate of surgical-site infection (SSI). The audit also examined whether margin status and SSI were associated with tumour grade, patient age or Ki-67 proliferation index.

Method/s: A retrospective audit of 218 women attending cancer surgery clinic at a Sri Lankan tertiary care peripheral surgical oncology unit was performed. Final histopathological margin status (R0/R1) and documented SSI within the postoperative period, were audited.

Results: Margin positivity was low at 1.4% (3/218), within international benchmarks and reflecting sound oncological technique. All three R1 cases were low-to-intermediate grade tumours (NG1–NG2) with no associated SSI, suggesting margin positivity was not linked to infective complications. SSI occurred in 7.3% (16/218) of patients, exceeding the 3–5% benchmark range. SSI was distributed across all Nottingham grades(NG) roughly in proportion to case volume (NG1 3.9%, NG2 8.5%, NG3 7.7%), and patients with and without SSI were similar in age (53.4 vs 54.5 years) and Ki-67 index (32.5% vs 31.9%), indicating infection risk was not concentrated in any tumour biology subgroup.

Conclusion/s: Oncological margin clearance is excellent. The elevated SSI rate is not explained by tumour grade, patient age, or proliferation index, pointing instead toward perioperative and technical factors, such as antibiotic prophylaxis timing, theatre antisepsis, and wound closure technique, as the more probable drivers. A focused review of perioperative protocols and risk-factor stratification is recommended to bring infection rates in line with international standards.

Keywords: *Breast cancer surgery; Resection margin; Surgical-site infection; Clinical audit; Sri Lanka*

MS1-IIB.3 **ORAL PRESENTATION** 1110–1125 · Main Hall-A

Clinicopathological Characteristics and Axillary Lymph Node Status in Operable Breast Cancer: A Retrospective Study from a Tertiary Oncology Centre in Sri Lanka

Dr. Jayanth Yoganathan[1*] *& Niroshan Atulugama; Sampath Hiranth Herath*[2]

[1]National Cancer Institute, Ministry of Health, Sri Lanka; [2]Ministry of Health, Sri Lanka

**Corresponding author:* jayanth91@hotmail.com

Background: Axillary lymph node involvement is a key prognostic factor in breast cancer, influencing staging, treatment, and survival.

Objective/s: To describe the clinicopathological characteristics and pathological axillary lymph node status of patients undergoing surgery for operable invasive breast cancer at a tertiary oncology centre in Sri Lanka.

Method/s: A retrospective observational study was conducted using a prospectively maintained breast surgery database. Consecutive patients with histologically confirmed invasive breast carcinoma who underwent definitive breast surgery with axillary

staging were included. Data collected included age, body mass index, tumour size, histological subtype, Nottingham grade, lymphovascular invasion, perineural invasion, hormone receptor status, HER2 status, neoadjuvant chemotherapy, type of surgery, and pathological axillary lymph node status. Descriptive statistics were used for analysis.

Results: A total of 91 patients were included. The mean age was 57.4 years. Patients demonstrated a broad range of clinicopathological characteristics, including variation in tumour size, histological grade, receptor status, and pathological nodal involvement. The findings provide an overview of the disease profile of patients with operable breast cancer treated at a tertiary oncology centre.

Conclusion/s: This study presents contemporary real-world data on the clinicopathological characteristics and axillary lymph node status of operable breast cancer in Sri Lanka. These findings improve understanding of local disease patterns and provide a foundation for future studies evaluating prognostic factors and treatment outcomes.

Keywords: *Breast cancer; Axillary lymph node status; Clinicopathological characteristics; Nottingham grade; Sri Lanka*

MS1-IIB.4 **ORAL PRESENTATION** 1125–1140 · Main Hall-A

Evaluation of Knowledge, Prevalence and Factors Associated with Occupational Hazards during Clinical Practices among Nursing Students in Bhutan: A Cross-Sectional Study

Mrs. Sangay Zam[1*]

[1]Public Health & Allied Health Sciences Dept., Faculty of Nursing & Public Health (FNPH), KGUMSB, Bhutan

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Background: Occupational health hazards are risks and unsafe conditions that can harm individuals in the workplace. Nursing students face various occupational hazards during clinical placement, exposing them to risks such as infection, injury and psychological hazards.

Objective/s: This study aimed to determine the level of knowledge on occupational hazards and evaluate the prevalence and factors associated with occupational hazards during clinical practices among nursing students.

Method/s: A descriptive cross-sectional study was conducted from March 2023 to June 2024 among nursing students enrolled in the Apollo Bhutan Institute of Nursing, Arura Academic of Health Sciences, Faculty of Nursing and Public Health, and the Royal Thimphu College. Data was collected using a self-administered questionnaire. The questionnaire included items related to physical, mechanical and psychological hazards as well as demographic variables.

Results: Among 654 students, a high level of knowledge was reported regarding occupational hazards-specifically, needle-prick and sharp injuries (87.5%), falls due to slippery floor (92%) and psychological stress (94.2%). The overall prevalence of exposure to physical, mechanical, and psychological hazards was found to be 81.2%, 70%, and 75.9%, respectively.

Conclusion/s: The study demonstrated a high level of knowledge among nursing students regarding occupational hazards. However, the prevalence of exposure to physical, mechanical, and psychological risks remains substantial. These findings underscore the need to strengthen clinical supervision, safer work environment, and prioritize Hepatitis B vaccination by the institutions.

Keywords: *Occupational hazards; Nursing students; Clinical practice; Needle-stick injury; Bhutan*

MS2

DAY 2 · MAIN SCIENTIFIC SESSION · SUB-THEME 2

Digital Health & AI in Healthcare

◆ **Friday, 27 November 2026 · Session C · Main Hall-A**

SESSION C · 1 HR 40 MINS

Moderators: Dr. Jigme Yoezer, Focal, DHIU-GMC & Medical Officer, CRRH (Chair) & Mr. Kinley Dorjee, Health Informatics & Research Division (HIRD), MoH (Co-chair)

MS2-IIIC.0 **INVITED SPEAKER** 1150–1210 · Main Hall-A

[Invited Talk – Sub-Theme 2]

Mr. Tshering[1]

[1]Chief Program Officer, Data Science & AI Division, GovTech Agency, Bhutan

Speaker profile: Mr. Tshering is Chief Program Officer of the Data Science & AI Division at the Government Technology (GovTech) Agency, Bhutan, appointed in 2025 after serving as Deputy Chief ICT Officer and Officiating Chief of the division. He leads the division's work on scalable data architecture for big and spatial data, data privacy and secure data exchange across agencies, supporting GovTech's efforts to build a centralised data-sharing platform and a national AI strategy for Bhutan.

MS2-IIIC.1 **ORAL PRESENTATION** 1210–1225 · Main Hall-A

A Hawkes Process Framework for Understanding Imported Malaria-Driven Local Transmission: A Case Study from Bhutan

Dr. Kinley Wangdi[1*]

[1]University of Canberra (UC), Canberra, ACT, Australia

**Corresponding author:* kinley.wangdi@canberra.edu.au

Background: Countries nearing malaria elimination often face continued local transmission driven by imported cases, and low case numbers limit the use of standard statistical methods to quantify this effect.

Objective/s: This study aimed to examine the role of imported malaria in sustaining local transmission using applied a semi-mechanistic approach.

Method/s: Laboratory-confirmed malaria cases between 2016 and 2020 were obtained from the Bhutan Vector-borne Disease Control Program. A semi-mechanistic Hawkes process model was used to assess the contribution of imported malaria to local transmission dynamics.

Results: A total of 285 malaria cases with 58.6% (159) of imported cases were reported during the study period. The estimated infectivity periods were 8 and 29 days for *Plasmodium falciparum* and *Plasmodium vivax* respectively. The background transmission intensity attributable to imported cases was higher for *P. vivax* (maximum 0.17) compared to *P. falciparum* (maximum 0.06), indicating a greater contribution of importation to *P. vivax* incidence. Model results suggested that local *P. falciparum* transmission was primarily driven by imported cases, whereas *P. vivax* transmission was influenced not only by importation but also by additional factors such as relapse.

Conclusion/s: Local *P. falciparum* transmission was largely driven by imported infections while *P. vivax* transmission was shaped by both importation and other sources of infection. Strengthening active detection and prompt treatment of imported *P. falciparum* cases may help interrupt local transmission, while further investigation into additional drivers, including relapse, is needed to effectively control *P. vivax*.

Keywords: *Imported malaria; Hawkes process; Malaria elimination; Plasmodium vivax; Bhutan*

MS2-IIIC.2 ORAL PRESENTATION 1225–1240 · Main Hall-A

Beyond Western Models: A Scoping Review and Contextually Adapted AI Literacy Framework for South Asian Medical Education – The SCALE Framework (Sensitize, Conceptualize, Apply, Lead, Evaluate)

Dr. Subin Hachhethu & Dr. Prashant Raj Karki[1*]
[1]Acaiberry Technologies, Nepal
*Corresponding author: subin@acaiberry.io

Background: AI is already used in South Asian hospitals, for example AI-assisted tuberculosis screening in Nepal and Bhutan, and AI-powered diabetic retinopathy detection and ECG interpretation in India. Medical curricula in the region have not kept pace. In surveys of Indian medical students, only 15% felt prepared to work with AI tools, and two-thirds had never encountered AI in their coursework. Existing AI literacy frameworks were developed elsewhere and may not suit South Asian settings.

Objective/s: To review existing AI literacy frameworks for medical education, identify the gaps that limit their use in South Asia, and propose a contextually adapted AI literacy curriculum framework for the region.

Method/s: A scoping review of published AI literacy frameworks for medical education was conducted. Frameworks were examined for their origin, regional relevance and underlying learning theory. Gaps between the frameworks and the South Asian context were identified. A new framework was then developed, grounded in Miller's Pyramid, Bloom's Taxonomy and the Dreyfus model of skill acquisition.

Results: Of the frameworks reviewed, 86% originated in the United States and Canada. None were designed for South Asia, and none named a learning theory behind their design, which limits their adaptability. Six gaps explained the mismatch: faculty training, infrastructure, disease burden, language, traditional medicine and regulation. In response, SCALE (Sensitize, Conceptualize, Apply, Lead, Evaluate) was developed as a five-level curriculum. Each level has a full version and a minimum viable version that requires no digital infrastructure or AI-trained faculty.

Conclusion/s: SCALE offers a theory-grounded, context-specific AI literacy framework for South Asian medical education that can be put into practice even in low-resource settings. Pilot implementation and evaluation in South Asian medical schools are needed to assess its feasibility and effectiveness.

Keywords: *Artificial intelligence; AI literacy; Medical education; Curriculum framework; South Asia*

MS2-IIIC.3 ORAL PRESENTATION 1400–1415 · Main Hall-A

AI-Based Feedback System for Neonatal Resuscitation: A Feasibility and Pilot Study in Japan and Bhutan

Dr. Dinesh Pradhan[1*]
[1]Dept. of Pediatrics, JDWNRH, Bhutan
*Corresponding author: dpradhan@jdwnrh.gov.bt

Background: Neonatal asphyxia causes approximately 900,000 deaths annually, with 15% of newborns requiring resuscitation at birth. Current training methods face significant challenges - On-the-Job training offers limited learning opportunities due to rarity of critical events, while Off-the-Job training lacks realism with participants not feeling fully confident. Low-dose, high-frequency training is effective but requires continuous access to feedback and mentorship, which is often unavailable in resource-limited settings.

Objective/s: This study aimed to develop and evaluate a smartphone-based, Artificial Intelligence-enabled video feedback system for neonatal resuscitation training, introducing a "Near-the-Job Training" paradigm that enables AI-supported video reflection immediately after resuscitation events. The system was designed to be scalable, low-cost, and deployable across diverse healthcare contexts without requiring specialized hardware.

Method/s: A two-phase implementation strategy was adopted: initial development and testing in Japan using fixed operating-room cameras, followed by deployment in Bhutan using smartphone recordings. Evaluation

included technical performance assessment, usability surveys with 59 medical personnel, and stakeholder workshops in Bhutan.

Results: The system accurately identified key resuscitation scenes including ventilation (88-90% accuracy), laryngoscope use (86-90%), and suction procedures (62-95%). User feedback was overwhelmingly positive, with majority respondents expressing interest in continued system use. Challenges included video quality issues, environmental differences affecting AI performance, and concerns about potential misuse of AI-generated evaluations.

Conclusion/s: The Near-JT system demonstrates feasibility for enhancing neonatal resuscitation training across diverse healthcare settings. While technical and ethical challenges remain, it offers a promising scalable solution, particularly valuable in resource-constrained environments where access to training is limited.

Keywords: *Neonatal resuscitation; Artificial intelligence; Video feedback; Simulation training; Bhutan*

MS2

MS2-IIIC.4 **ORAL PRESENTATION** 1415–1430 · Main Hall-A

Objectively Measured Physical Activity Before, During and After COVID-19 Movement Restrictions in Bhutan: N-of-1 Wearable Interrupted Time-Series Study

Mr. Tshering Jamtsho[1*] *& Tashi Norbu*[2]*; Zimba Letho*[3]

[1]Research & Innovation Division, MECRIT, KGUMSB, Bhutan; [2]CPD, MECRIT, KGUMSB, Bhutan; [3]Faculty of Nursing & Public Health (FNPH), KGUMSB, Bhutan

**Corresponding author:* tj@kgumsb.edu.bt

Background: Physical inactivity is a driver of non-communicable disease, yet evidence on COVID-19 movement restrictions relies on self-report, with little evidence from Bhutan.

Objective/s: To quantify the effect of Bhutan's COVID-19 movement restrictions on active energy expenditure (AEE), and assess recovery.

Method/s: N-of-1 interrupted time-series study using 646,084 Apple Watch AEE records from one Thimphu resident over 728 days (18 October 2019–14 October 2021). After removing 42,071 duplicate records (6.5%), AEE was analysed for days with ≥10 hours of device coverage. Segmented regression with Newey–West standard errors modelled pandemic onset, three lockdown periods, seasonality, weekends and secular trend. Binary-segmentation changepoint detection was performed blinded to dates.

Results: 718 days (98.6%) met the wear criterion. AEE was 560.5 kcal/day (SD 242.8). Lockdown days averaged 421.7 versus 571.3 kcal/day on pandemic days (-26.2%; $p = 2.9 \times 10^{-8}$; Cohen d = -0.62). Effects were -210.0 kcal/day (95% CI -286.6 to -133.4) for pandemic onset and -133.7 kcal/day (95% CI -201.3 to -66.2) for lockdown. The December 2020 lockdown reduced AEE by 362.2 kcal/day ($p < 0.001$), while the April 2021 Phuentsholing restriction had no effect in Thimphu ($p = 0.69$). Changepoint detection identified 2 March 2020 and 20 December 2020. Activity recovered within six weeks of each lifting (all $p \geq 0.26$).

Conclusion/s: Lockdowns reduced activity by approximately one quarter, with complete behavioural rebound. Corrected consumer-wearable data can provide low-cost activity surveillance for non-communicable disease prevention in resource-constrained health systems.

Keywords: *Physical activity; Wearable devices; COVID-19; N-of-1; NCD; Digital health; Bhutan*

PANEL

DAY 2 · MAIN SCIENTIFIC SESSION D · MAIN HALL-A

Panel Discussion: Ethics in Health Research

◆ **Friday, 27 November 2026 · 1440–1700 Hrs · Main Hall-A**

SESSION D · 1 HR 20 MINS

Moderator: Mr. Zimba Letho, Lecturer & IRB Chairperson, FNPH, KGUMSB (Chair)

MS-IVD.a **INVITED SPEAKER** 1440–1500 · Main Hall-A

[Invited Talk – Panel Discussion]

Dr. Mongal Singh Gurung[1]

[1]Principal Research Officer, Health Informatics & Research Division (HIRD), MoH, Bhutan

> **Speaker profile:** *[See speaker profile under Session: S2-IIB.1]*

MS-IVD **PANEL DISCUSSION** 1500–1640 · Main Hall-A

Ethics in Health Research: Protecting Participants, Enabling Science, Safeguarding Bhutan

About the panel: This interactive panel examines how well Bhutan's research ethics system protects participants, enables quality research and keeps pace with international collaboration, in the context of the Institutional Review Board (IRB), KGUMSB and the Research Ethics Board of Health (REBH), MoH. Each panelist answers one spotlight question from their own perspective, followed by a shared case challenge, audience questions and a lightning close.

PANELISTS

Q1	**Dr. Chabilal Adhikari** Professor of Community Medicine & REBH Chairperson, FoUGM, KGUMSB · *National ethics review*
Q2	**Mr. Kuenzang** Lecturer, FNPH, KGUMSB · *Health ethicist*
Q3	**Mr. Tshering Nidup** Dy. Chief Legal Officer, Legal Services Unit, MoH · *Legal & regulatory*
Q4	**Dr. Kaveh Khoshnood** Epidemiology (Microbial Diseases), Yale School of Public Health, USA · *International research ethics & global health*
Q5	**Dr. Mongal Singh Gurung** Principal Research Officer, HIRD, MoH · *National research governance*

S3

DAY 2 · PARALLEL SYMPOSIUM 3 · HALL-B

Infections and Global Health

◆ **Friday, 27 November 2026 · 0900–1300 Hrs · Hall-B**

SESSION A · 1 HR 30 MINS

Moderators: Dr. Tshokey, Consultant Clinical Microbiologist, JDWNRH (Chair) & Dr. Sonam Zangmo, Internal Medicine Specialist & Infectious Disease Physician, JDWNRH (Co-chair)

S3-IA.1 **SYMPOSIUM TALK** 0900–0930 · Hall-B

Setting up a Modern Travel Health Service: Challenges and Opportunities

Prof. Gerard Flaherty[1]

[1]Professor, University of Galway, Ireland

Speaker profile: Prof. Gerard Flaherty is Personal Professor of Travel Medicine and International Health at the School of Medicine, University of Galway, and Adjunct Professor at the International Medical University, Malaysia, and Mahidol University, Thailand. He is Immediate Past President of the International Society of Travel Medicine (ISTM), the first Irish person to hold the role. His research spans pre-travel risk assessment, travellers with pre-existing conditions, high-altitude medicine and mental health in travel.

S3-IA.2 **SYMPOSIUM TALK** 0930–0950 · Hall-B

Tools Facilitating Dengue Molecular Surveillance in Resource-Limited Settings

Dr. Audrey Dubot-Pérès[1]

[1]Head of Virology, Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit (LOMWRU), France

Speaker profile: Dr. Audrey Dubot-Pérès is Head of Virology at the Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit (LOMWRU), Vientiane, Laos, and an Honorary Visiting Research Fellow in Tropical Medicine. Working with the Unité des Virus Émergents, Marseille, Dr. Dubot-Pérès leads research on viral infections of medical importance in Laos, including central nervous system infections, dengue and other arboviruses, Japanese encephalitis and acute respiratory infections in children, with a focus on diagnostics suitable for remote settings.

S3-IA.3 **SYMPOSIUM TALK** 0950–1010 · Hall-B

Antimicrobial Susceptibility and Multidrug-Resistance in Bloodstream Infections at a Regional Hospital, Bhutan

Mr. Sanga Tenzin[1]

[1]Pharmacist, ERRH, NMS, Mongar, Bhutan

Speaker profile: Mr. Sanga Tenzin is a Pharmacist at the Eastern Regional Referral Hospital (ERRH), Monggar, one of Bhutan's three tertiary referral hospitals, serving the eastern region. His hospital pharmacy work centres on the safe and rational use of medicines at a facility with an established antimicrobial stewardship programme. At this symposium, he presents findings on antimicrobial susceptibility and multidrug resistance in bloodstream infections at ERRH, contributing local evidence to guide empirical antibiotic therapy and strengthen AMR surveillance in Bhutan.

S3-IA.4 **SYMPOSIUM TALK** 1010–1030 · Hall-B

From Research to Action: Supporting Sustainable AMR Solutions in LMICs

Dr. Pem Choki[1]

[1]Science Advisor, International Centre for Antimicrobial Resistance Solutions (ICARS), Copenhagen, Denmark

Speaker profile: Dr. Pem Chuki is Science Advisor for Antimicrobial Stewardship (AMS) and Infection Prevention and Control (IPC) at the International Centre for Antimicrobial Resistance Solutions (ICARS), Copenhagen. A medical doctor and clinical pharmacologist (MBBS, MD, DTM&H) with over 10 years of AMS and IPC experience across South-East Asia,

she previously led the antimicrobial stewardship programme at JDWNRH, Thimphu, as a Fleming Fund Fellow, and has served as a WHO trainer for antimicrobial stewardship in the South-East Asia Region.

SESSION B · 2 HRS

Moderators: Dr. Tshokey, Consultant Clinical Microbiologist, JDWNRH (Chair) & Dr. Sonam Zangmo, Internal Medicine Specialist & Infectious Disease Physician, JDWNRH (Co-chair)

S3-IIB.1 **SYMPOSIUM TALK** 1100–1120 · Hall-B

Leptospirosis: A Neglected and Re-emerging Zoonotic Disease

Dr. Mathieu Picardeau[1]
[1]Head of Laboratory, Institut Pasteur, Paris, France

Speaker profile: Dr. Mathieu Picardeau is Head of the Biology of Spirochetes Unit and the French National Reference Center for Leptospirosis at the Institut Pasteur, Paris; the unit also serves as a WHO Collaborating Centre. Trained in microbiology in Paris, with a PhD on atypical mycobacteria and postdoctoral research at Rocky Mountain Laboratories, USA, he studies the biology, genomics and virulence of Leptospira, working worldwide to improve the understanding, diagnosis and control of leptospirosis, a neglected zoonotic disease.

S3-IIB.2 **SYMPOSIUM TALK** 1120–1140 · Hall-B

Sero-epidemiology of Leptospirosis in Sarpang, Bhutan

Mr. Monu Tamang[1]
[1]Dy. Chief Physiotherapist, CRRH, Gelephu, Bhutan

Speaker profile: [To be inserted]

S3-IIB.3 **SYMPOSIUM TALK** 1140–1200 · Hall-B

KAP on Leptospirosis and Incidence of Leptospirosis among Clinical Specimens at Five PCR-Capable Centres

Dr. Thinley Dorji[1]
[1]Medical Specialist, CRRH, Gelephu, Bhutan

Speaker profile: *[See speaker profile under Session: S1-IIB.2]*

S3-IIB.4 **SYMPOSIUM TALK** 1200–1220 · Hall-B

Contrasting the Ecologies of Scrub and Murine Typhus

Dr. Ivo Elliott[1]
[1]Consultant in Infectious Diseases, Centre for Tropical Medicine & Global Health, University of Oxford, UK

Speaker profile: Dr. Ivo Elliott (DPhil, FRCPath, MRCP, DTM&H) is a Consultant in Infection at Oxford University Hospitals and Honorary Senior Clinical Lecturer at the Centre for Tropical Medicine & Global Health, University of Oxford. He completed a Wellcome Trust Research Training Fellowship and DPhil at Oxford in 2019, researching the clinical epidemiology and ecology of scrub typhus in Thailand and Laos. His interests include vector-borne infections transmitted by mites and ticks, GIS mapping, and climate and habitat effects on disease risk.

S3-IIB.5 **SYMPOSIUM TALK** 1220–1240 · Hall-B

Recent Advances in Scrub Typhus Management

Prof. Paul Newton[1]
[1]Professor, Centre for Tropical Medicine & Global Health, University of Oxford, UK

Speaker profile: Prof. Paul Newton is Professor at the Centre for Tropical Medicine & Global Health, University of Oxford, and Head of the Medicine Quality Research Group at the Infectious Diseases Data Observatory (IDDO). He was the founding Director of the Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit (LOMWRU), Vientiane, from 2000 to 2019, after four years at the Mahidol Oxford Research Unit, Bangkok, working on malaria and melioidosis. His research spans medicine quality, malaria and rickettsial and other tropical infections.

S4

DAY 3 · PARALLEL SYMPOSIA 4 · HALL-B

POCUS & Clinical Cases

◆ **Saturday, 28 November 2026 · 0900–1300 Hrs · Hall-B**

SESSION A · 1 HR 30 MINS

Symposium on Pediatric Point-of-Care Ultrasound (POCUS) – Current Practice, Emerging AI Applications & Future Directions

Moderators: Dr. Mimi Lhamu Mynak, Pediatrician, NMS, JDWNRH (Chair) & Dr. Jigme Yoezer, Focal, DHIU-GMC & Medical Officer, CRRH (Co-chair)

S4-IA.1 **SYMPOSIUM TALK** 0900–0920 · Hall-B

Pediatric POCUS – Global Perspectives and Clinical Applications

Dr. Christian Schmidt[1]

[1]Pediatrician & Project Lead, International Paediatric Ultrasound Network (IPUN), Germany

Speaker profile: Dr. Christian Schmidt is a Pediatrician and Project Lead of the International Paediatric Ultrasound Network (IPUN), run by the German Society for Tropical Paediatrics and International Child Health (GTP). IPUN builds on nearly two decades of ultrasound training in low- and middle-income countries, developing targeted curricula and regular courses with partner hospitals in Bhutan and Nepal. In Bhutan, Dr. Schmidt's team works with JDWNRH and the Gyaltsuen Jetsun Pema Wangchuck Mother and Child Hospital to train paediatric ultrasound trainers.

S4-IA.2 **SYMPOSIUM TALK** 0920–0940 · Hall-B

Pediatric POCUS in Bhutan – Current Status and Future Opportunities

Dr. Sonam[1]

[1]Pediatrician & Pediatric Intensivist, JDWNRH, Bhutan

Speaker profile: Dr. Sonam is a Pediatrician and Pediatric Intensivist at the Jigme Dorji Wangchuck National Referral Hospital (JDWNRH), Thimphu, the country's main referral hospital, caring for critically ill children in the hospital's Paediatric Intensive Care Unit (PICU). Dr. Sonam is a Bhutanese investigator on the GTP-supported study "Improvement of Child Health in Low-Resource Settings through Implementation of Ultrasonography", which introduces paediatric point-of-care ultrasound training to strengthen bedside diagnosis for children in Bhutan.

S4-IA.3 **SYMPOSIUM TALK** 0940–1000 · Hall-B

Artificial Intelligence and the Future of Ultrasound

Mr. Bishesh Khanal[1]

[1]Founding Director & Research Scientist, NepAI Applied Mathematics and Informatics Institute for Research (NAAMII), Nepal

Speaker profile: Dr. Bishesh Khanal is Founding Director and Research Scientist at the NepAI Applied Mathematics and Informatics Institute for Research (NAAMII), Nepal's leading AI research institute. After a PhD from INRIA, France (2016), and postdoctoral research at King's College London and Imperial College London, he returned to Nepal in 2019. He leads NAAMII's TOGAI group, developing low-cost medical imaging AI, AI-powered task-shifting for primary and community health centres, and local-language AI solutions for the Global South.

SESSION B · CLINICAL SYMPOSIUM · 2 HR 35 MINS

Moderator: Dr. Aashish Chaudhry, Managing Director & Head, Aakash Healthcare Super Speciality Hospital, New Delhi, India (Chair)

S4-IIB.0 **INVITED SPEAKER** 1100–1120 · Hall-B

[Keynote Address – Clinical Symposium]

Dr. Aashish Chaudhry[1]

[1]Managing Director & Head, Aakash Healthcare Super Speciality Hospital, New Delhi, India

Speaker profile: Dr. Aashish Chaudhry is Managing Director of Aakash Healthcare Super Speciality Hospital, a tertiary-care institution with facilities in Dwarka, New Delhi, and Agra, Uttar Pradesh, where he also heads the Department of Orthopaedics & Joint Replacement. A practising orthopaedic and joint replacement surgeon with over two decades of experience, he holds MBBS, MS (Ortho), MRCS (Glasgow), MCh (Ortho) and Dip. SICOT qualifications, complemented by healthcare management training at the Indian School of Business. His clinical focus includes robotic and partial knee replacement and hip replacement. Under his leadership, the hospital treated over 10,000 COVID-19 patients and expanded to Agra in 2023.

S4-IIB.1 **SYMPOSIUM TALK** 1120–1135 · Hall-B

Carbon-Negative, Kidney-Positive: Rethinking Pediatric Nephrology through Planetary Health

Dr. Jimba Jatsho[1]

[1]Consultant Pediatrician, Pediatric Dept., JDWNRH, Bhutan

Speaker profile: Dr. Jimba Jatsho is a Consultant Pediatrician in the Department of Pediatrics at JDWNRH, Thimphu, and one of the first two pediatricians trained through Bhutan's own postgraduate medical programme. Supported by Health Volunteers Overseas (HVO), he went on to a pediatric nephrology fellowship, completed in 2024, and now provides specialist pediatric kidney care in Bhutan, where children with serious kidney disease previously often died without specialist treatment. His interests include pediatric nephrology and specialist child health capacity.

S4-IIB.2 **SYMPOSIUM TALK** 1135–1150 · Hall-B

Person-Centred Diabetes Care in Bhutan

Dr. Sanjay Kalra[1]

[1]Consultant Endocrinologist, Dept. of Endocrinology, Bharti Hospital, India

Speaker profile: Dr. Sanjay Kalra (MD, DM, FRCP Edin) is a Consultant Endocrinologist at Bharti Hospital, Karnal, India, with over two decades of experience in diabetes and endocrinology. He trained in endocrinology at AIIMS, New Delhi, and is a Past President of the Endocrine Society of India, the South Asian Federation of Endocrine Societies (SAFES) and the Indian Professional Association for Transgender Health. A prolific researcher and medical writer, he focuses on insulin therapy, obesity and person-centred diabetes care.

S4-IIB.3 **SYMPOSIUM TALK** 1150–1205 · Hall-B

Beyond the Myths: COVID-19 Vaccine Safety and Response – Evidence from Bhutan

Dr. Sithar Dorjee[1]

[1]One Health International Consultant, SEARO-WHO, New Delhi, India

Speaker profile: Dr. Sithar Dorjee is a One Health International Consultant with the WHO Regional Office for South-East Asia (SEARO), New Delhi. An epidemiologist, he previously served as Assistant Professor of Epidemiology at Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB), and has supported Bhutan's One Health zoonotic disease prioritization and joint risk assessments, including H5N1 spill-over risk pathways. His work spans zoonotic diseases such as rabies, vector-borne infections such as scrub typhus, and COVID-19 vaccine safety.

S4-IIB.4 SYMPOSIUM TALK 1215–1230 · Hall-B

On the Far Side of Avoiding Risky Substances in the Lifestyle Medicine Pillar

Dr. Bancha Daengneam[1]

[1]Medical Doctor, Thai Lifestyle Medicine and Wellbeing Association (TLWA), Thailand

Speaker profile: Dr. Bancha Daengneam is a Medical Doctor with the Thai Lifestyle Medicine and Wellbeing Association (TLWA), Thailand. A graduate in medicine from Prince of Songkla University, Dr. Daengneam works in integrative and lifestyle medicine, focusing on how everyday choices in diet, physical activity and substance use shape chronic disease risk. Dr. Daengneam has presented to Thailand's Department of Disease Control on new paradigms of health care for preventing non-communicable diseases such as hypertension and chronic kidney disease.

S4-IIB.5 SYMPOSIUM TALK 1230–1245 · Hall-B

Bridging Two Knowledge Systems: A Community-Based Capacity Development Framework from Bhutan *[Virtual]*

Mr. Satoshi Nimura[1]

[1]Medical Researcher & Academic, Postgraduate School of Medicine, Tokai University, Japan

Speaker profile: Mr. Satoshi Nimura is a Medical Researcher and Academic at the Postgraduate School of Medicine, Tokai University, Japan. His work focuses on community-based capacity development in Bhutan, exploring how scientific and local traditional knowledge can work together to strengthen local health systems. At this symposium, he presents virtually a community-based framework for bridging these two knowledge systems, drawing on collaborative work with communities and health partners in Bhutan.

S4-IIB.6 SYMPOSIUM TALK 1245–1300 · Hall-B

Learning from Nature and Traditional Knowledge: Digital Fingerprinting of Traditional Medicines Transforms Human Experience into AI-ready Knowledge *[Virtual]*

Mr. Hidenori Nakajima[1]

[1]Medical Researcher, Kyoto Sangyo University, Japan

Speaker profile: Mr. Hidenori Nakajima is a Medical Researcher at Kyoto Sangyo University, Japan. His research explores how traditional medicine knowledge can be documented and analysed with modern digital tools, using digital fingerprinting of traditional medicines to turn practitioners' accumulated experience into structured, AI-ready data. At this symposium, he presents virtually on learning from nature and traditional knowledge, and on how such approaches could support the preservation and evidence-based development of traditional medicine, including in Bhutan.

S4-IIB.7 SYMPOSIUM TALK 1400–1415 · Hall-B

Strengthening Preventive Health Education for Hypertensive Patients in the Emergency Department, JDWNRH, Bhutan: A Holistic Approach Addressing Challenges and Implementing Interventions

Ms. Karma Yangchen[1]

[1]Clinical Nurse, Emergency Dept., JDWNRH, Bhutan

Speaker profile: Ms. Karma Yangchen is a Clinical Nurse in the Emergency Department of Jigme Dorji Wangchuck National Referral Hospital (JDWNRH), Thimphu, which provides round-the-clock emergency care to over 40,000 patients a year. Working at the front line of acute care, she has a particular interest in preventive health education for patients with hypertension. At this symposium, she presents a holistic approach to strengthening hypertension education in the emergency setting, addressing challenges and implementing interventions.

MS3

DAY 3 · MAIN SCIENTIFIC SESSION · SUB-THEME 3

Lifestyle Modification for Health & Well-being

◆ **Saturday, 28 November 2026 · Session A · Main Hall-A**

SESSION A · 1 HR 55 MINS

Moderators: Dr. Diki Wangmo, Dean, Apollo Bhutan Institute of Nursing (ABIN), Thimphu (Chair) & Dr. Mahesh Gurung, Interventional Cardiologist, JDWNRH (Co-chair)

MS3-IA.0 **INVITED SPEAKER** 0900–0920 · Main Hall-A

[Invited Talk – Sub-Theme 3]

Dasho Dechen Wangmo[1]

[1]Head, The PEMA Secretariat, Bhutan

Speaker profile: Dasho Dechen Wangmo is the Head of The PEMA Secretariat, Bhutan's national nodal agency for mental health and child protection services. Appointed by Her Majesty The Gyaltsuen Jetsun Pema Wangchuck, she took office in March 2024. She served as Bhutan's Minister for Health from 2018 to 2023 and, during the COVID-19 pandemic, was elected President of the 74th World Health Assembly. She is a member of the Global Leaders Group on Antimicrobial Resistance and founder of the Bhutan Cancer Society. A strong advocate of universal health coverage and mental health services for all, she holds an MPH (Global Health Epidemiology) from Yale School of Public Health and a BSc. in Cardiopulmonary Science from Northeastern University, USA.

MS3-IA.1 **ORAL PRESENTATION** 0920–0935 · Main Hall-A

Breastfeeding Mothers' and Nurses' Perceptions of Breast Milk Sharing and Donation for Research in Bhutan: A Qualitative Study

Mr. Kuenzang[1*] *& Vina Vaswani*[2]

[1]Nursing Dept., FNPH, KGUMSB, Bhutan; [2]Dept. of Forensic Medicine & Toxicology, Centre for Ethics, Yenepoya University, Karnataka, India]

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Background: Breast milk is globally recognized as the optimal source of infant nutrition due to its immunological and neurodevelopmental benefits. In LMIC like Bhutan, limited availability of donor milk and absence of milk banking infrastructure hinder neonatal nutrition. While breast milk sharing for feeding has been explored elsewhere, little is known about maternal and nursing perspectives of milk donation for research use within Bhutanese.

Objective/s: To explore breastfeeding mothers' perceptions of breast milk sharing and donation for both nutritional and research purposes, emphasizing the facilitating role of nurses.

Method/s: A qualitative exploratory design was used. Fifty-nine participants, 44 breastfeeding mothers and 15 neonatal ICU nurses, from JDWNRH,Bhutan, were recruited through purposive sampling. Data was thematically analyzed following Braun and Clarke's six-phase framework using NVivo 12 software.

Results: Four themes emerged: (1) Breast milk sharing nutrition; breastfeeding mothers expressed altruism but feared diseases transmission and cultural restriction; (2) Breast milk donation for research; breastfeeding mothers perceived potential societal benefits yet cited infrastructural gaps and religious hesitancy; (3) Nurses as facilitators on breast milk nutrition; neonatal nurses promoted

breastfeeding and informal sharing despite lacking standard operating procedures; (4) Nurses' role in research; nurse viewed research as transformative but faced capacity and resource constraints.

Conclusion/s: Support for breast milk sharing in Bhutan is conditional, shaped by altruism, cultural norms, safety concerns, and system readiness. Strengthening nurse training, developing SOPs, and culturally sensitive community engagement are essential for promoting safe, ethical milk sharing and research participation.

Keywords: *Breastfeeding; Mothers; Neonatal Nurses: Research; Bhutan*

MS3-IA.2 **ORAL PRESENTATION** 0935–0950 · Main Hall-A

Prevalence of Metabolic Syndrome and its Association with 30-Day Major Adverse Cardiovascular Events in Acute Coronary Syndrome Patients at a National Referral Hospital in Bhutan

Dr. Deki Choden[1*] *& Mahesh Gurung*[2]*; Kuenzang Chhenzom*[3]*; Porntep Amornritvanich*[4]

[1]Dept. of Internal Medicine, FoPGM, KGUMSB, Bhutan; [2][Heart Center, JDWNRH, Bhutan]; [3][Office of the President (OOP), KGUMSB, Bhutan]; [4][na]

**Corresponding author:* dekichoden7194@gmail.com

Background: Metabolic syndrome is a global major driver of atherosclerotic cardiovascular disease, but its burden and impact on short-term outcomes in Bhutanese patients with acute coronary syndrome are unknown.

Objective/s: To determine metabolic syndrome prevalence among ACS patients and its association with 30-day major adverse cardiovascular events (MACE).

Method/s: This prospective study enrolled 140 ACS patients over ten months (January–October 2025). Metabolic syndrome was defined using harmonized criteria (any three of five components). Patients were followed for 30 days for five-point MACE. Multivariable logistic regression identified independent predictors.

Results: Metabolic syndrome prevalence was 70% (98/140). Mean age was 66 years; 65.7% were male. Non-ST elevation myocardial infarction was most common (47.1%). Hypertension predominated in both sexes. At 30 days, 40.7% experienced MACE, with heart failure dominating (77.2%). MACE rates were similar with and without metabolic syndrome (40.8% vs. 40.5%, p=0.970). On multivariable analysis, left ventricular ejection fraction (OR 0.90, 95% CI 0.86–0.94, p<0.001) and chronic kidney disease (OR 2.94, 95% CI 1.03–8.38, p=0.044) predicted MACE, but metabolic syndrome did not (OR 0.69, p=0.421).

Conclusion/s: Metabolic syndrome affects 70% of Bhutanese ACS patients, yet short-term outcomes are driven more by ventricular dysfunction and renal disease. National strategies should prioritize primary prevention, early reperfusion, and structured post-discharge heart failure care.

Keywords: *Metabolic syndrome; Acute coronary syndrome; Major adverse cardiovascular events; Left ventricular ejection fraction; Bhutan*

MS3-IA.3 **ORAL PRESENTATION** 0950–1005 · Main Hall-A

Effect of Perioperative Oral Probiotic Supplementation on Perioperative Neurocognitive Disorders in Elderly Patients Undergoing Hip or Knee Arthroplasty: A Double-Blind Randomized Controlled Trial

Prof. Puneet Khanna[1*] *& Sneha Sharma*[1]

[1]Dept. of Anaesthesiology, All India Institute of Medical Sciences (AIIMS), New Delhi, India

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Background: Perioperative neurocognitive disorders (PND), including postoperative delirium (POD) and postoperative cognitive dysfunction (POCD), are common complications in elderly patients undergoing major arthroplasty and are associated with increased morbidity, prolonged hospitalization, and reduced quality of life. Gut dysbiosis induced by surgical stress may contribute to neuroinflammation through the gut–brain axis. Probiotics have emerged as a potential strategy to preserve cognitive function by modulating neuroinflammation and neurotrophic signaling.

Objective/s: To evaluate the effect of perioperative Lactobacillus acidophilus supplementation on POD, POCD, and serum brain-derived neurotrophic factor (BDNF) and malondialdehyde (MDA) levels.

Method/s: In this double-blind, randomized, placebo-controlled trial (CTRI/2024/08/072798), 250 patients aged ≥60 years undergoing elective hip or knee arthroplasty received either Lactobacillus acidophilus (2 billion CFU/day) or placebo from two weeks before to two weeks after surgery. Cognitive function was assessed using MMSE, MoCA, Trail Making Test, Stroop Test, Porteus Maze Test, and DRS-R-98. Serum BDNF and MDA levels were measured.

Results: The incidence of POCD (16.0% vs. 21.6%) and POD (2.4% vs. 5.6%) was comparable between groups ($p>0.05$). However, the probiotic group showed significantly better postoperative cognitive performance on MoCA, Trail Making Test, Porteus Maze Test, and Stroop Test. BDNF levels were preserved in the probiotic group but declined significantly in the placebo group ($p=0.002$), while MDA levels were comparable.

Conclusion/s: Perioperative Lactobacillus acidophilus did not significantly reduce POD or POCD incidence but improved specific cognitive domains and preserved BDNF levels, suggesting a potential neuroprotective effect via the gut–brain axis.

Keywords: *Probiotics; Postoperative cognitive dysfunction; Postoperative delirium; Brain-derived neurotrophic factor; Arthroplasty*

MS3-IA.4 **ORAL PRESENTATION** 1015–1030 · Main Hall-A

In Vivo Visualization of Cardiac Extracellular Adenosine Dynamics in Heart Failure Reveals a Novel Therapeutic Target for Preserving Cardiac Health

Dr. Phurpa[1,2*] *& Ryohei Umeda*[3]*; Shinichiro Kume*[2]*; Magdeline Elizabeth Carrasco Apolinario*[2]*; Menting Shan*[2]*; Kenshiro Shikano*[2]*; Hitoshi Teranishi*[2]*; Takatoshi Hikida*[3]*; Toshikatsu Hanada*[4]*; Yulong Li*[5]*; Reiko Hanada*[1]

[1]FoUGM, KGUMSB, Bhutan; [2]Department of Physiology, Faculty of Medicine, Oita University, Oita, Japan; [3]Faculty of Medicine, Oita University, Oita, Japan; [4]Laboratory for Advanced Brain Functions, Institute for Protein Research, Osaka University, Osaka, Japan; [5]State Key Laboratory of Membrane Biology, Peking University School of Life Sciences, Beijing, China

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Background: Heart failure (HF) is a leading cause of morbidity and mortality and is closely associated with chronic inflammatory conditions, including obesity, diabetes, hypertension, and chronic stress. Although lifestyle modification is essential for HF prevention, the molecular mechanisms linking chronic inflammation to cardiac dysfunction remain poorly understood.

Objective/s: [To visualize cardiac extracellular adenosine dynamics during HF progression *in vivo* and evaluate whether inhibition of vesicular nucleotide transporter (VNUT)-mediated purinergic signaling preserves cardiac function.

Method/s: A cardiomyocyte-specific $GRAB_{Ado}$ transgenic zebrafish model was used to visualize extracellular adenosine *in vivo*. HF was induced with terfenadine. Cardiac function, calcium homeostasis, inflammation, apoptosis, and extracellular adenosine levels were assessed following VNUT inhibition alone or combined with P2X7 receptor or pannexin-1 hemichannel antagonists.

Results: HF caused marked cardiac extracellular adenosine accumulation, impaired contractility, calcium dysregulation, increased apoptosis, and activation of inflammatory pathways. VNUT inhibition significantly reduced extracellular adenosine levels, restored calcium homeostasis,

suppressed caspase-1/IL-1β signaling, improved the Bax/Bcl-2 balance, and enhanced fractional shortening, ejection fraction, and cardiac output. Cardioprotection was further enhanced by co-treatment with P2X7 receptor or pannexin-1 hemichannel antagonists.

Conclusion/s: This study provides the first direct *in vivo* visualization of cardiac extracellular adenosine dynamics during HF progression and identifies VNUT-mediated purinergic signaling as a promising therapeutic target. These findings provide mechanistic insights that may support the development of adjunctive therapies alongside lifestyle interventions to preserve cardiac health.

Keywords: *Heart failure; Extracellular adenosine; Vesicular nucleotide transporter; Purinergic signaling; Zebrafish*

MS3-IA.5 **ORAL PRESENTATION** 1100–1115 · Main Hall-A

Understanding Childhood Disability Burden and Risk Factors: Evidence from the 2023 National Health Survey

Dr. Tashi Dendup[1*] *& Tshering Jamtsho*[2]*; Thinley Dorji*[1]*; Kinley Dorjee*[3]*; Tshering Syelden Namgyel*[1]*; Karma Doma Tsherin*[1]*; Laigden Dzed*[4]*; Sonam Choden*[4]*; Tenzin Dema*[4]*; Mongal Singh Gurung*[3]*; Tshetrim Tobgay*[1]

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Background: Disability in children significantly impacts children's quality of life and their overall productivity. Data on the burden and associated risk factors of childhood disability that is crucial for prevention and policy development to reduce the disability burden is limited in Bhutan.

Objective/s: This study examined the prevalence and factors associated with disability in children in Bhutan.

Method/s: This study analyzed the most recent nationally representative data of the 2023 Bhutan National Health Survey. A total of 5654 children aged 5-17 years were included for this study. Multiple logistic regression using the backward elimination approach that accounted for the complex survey design was undertaken.

Results: The prevalence of childhood disability was 6.5%, with the highest rates observed in Zhemgang (17.3%), and Trashi Yangtse and Mongar (~12%) districts. The most common disability was difficulty with self-care (5.6%), particularly among younger children (5-9 years) and boys. Increasing child age, older maternal age, and maternal employment were associated with lower odds of disability. Conversely, maternal substance use, exposure to violence, maternal diabetes, and non-facility births increased the odds across various subgroups. In urban areas, residence in the central region was associated with higher disability odds.

Conclusion/s: Around 7% of Bhutanese children had at least one disability, with the highest prevalence in Zhemgang district. The findings highlight the combined influence of demographic, maternal, socioeconomic and regional factors on disability. They underscore the need for strengthened early detection, improved MCH services, and targeted socio-environmental interventions to reduce childhood disability in Bhutan.

Keywords: *Childhood disability; Prevalence; Maternal factors; National Health Survey; Bhutan*

MS4

DAY 3 · MAIN SCIENTIFIC SESSION · SUB-THEME 4

Planetary Health & Emerging Global Health Challenges

◆ **Saturday, 28 November 2026 · Session B · Main Hall-A**

SESSION B · 1 HR 30 MINS

Moderators: Dr. Sithar Dorjee, One Health International Consultant, SEARO, WHO, New Delhi, India (Chair) & Dr. Dorji Tshering, Chief Medical Officer, Phuentsholing General Hospital, NMS, MoH (Co-chair)

MS4-IIB.0 **INVITED SPEAKER** 1125–1145 · Main Hall-A

[Invited Talk – Sub-Theme 4]

Dr. Kaveh Khoshnood[1]

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Speaker profile: Dr. Kaveh Khoshnood is an Associate Professor of Epidemiology (Microbial Diseases) at the Yale School of Public Health and Program Co-Director of the Global Health Ethics Program at the Yale Institute for Global Health. Trained as an infectious disease epidemiologist, he brings more than three decades of public health research, education and practice. His work spans humanitarian health and crisis epidemiology, research ethics, and HIV and substance use prevention among vulnerable populations. He leads the PEACE Lab and has mentored researchers in Bhutan, Lebanon and China. He holds an MPH and PhD from Yale.

MS4-IIB.1 **ORAL PRESENTATION** 1145–1200 · Main Hall-A

Prevalence of Helicobacter pylori Infection Using Rapid Stool Antigen Test: A Cross-Sectional Survey among Thimphu City Residents

Dr. Passang Lhamo Sherpa[1*] *& Yoshio Yamaoka*[2]

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Background: Helicobacter pylori *(H. pylori)* is a World Health Organization Group I carcinogen and the principal cause of chronic gastritis, peptic ulcer disease, and a major risk factor for gastric cancer. Although *H. pylori* prevalence in Bhutan has declined substantially over the past decade, infection remains common, and updated data among asymptomatic adults are limited.

Objective/s: This study assessed the prevalence of *H. pylori* infection and associated risk factors among asymptomatic adults in Thimphu City.

Method/s: A cross-sectional survey was conducted from June to September 2025 across six primary health centers in Thimphu City. Asymptomatic adults aged 18–75 years were screened using a rapid stool antigen immunochromatographic test kit. Demographic and clinical data were collected, and factors associated with infection were analyzed using multivariable logistic regression in STATA version 14.2.

Results: Among 1,488 participants (mean age 39.4 ± 13.7 years), the prevalence of *H. pylori* infection was 30.1% (95% CI: 27.8–32.5). After multivariate adjustment age ≤49 years, attendance at Dechencholing Hospital, high school education, abdominal burning symptoms, and not having received or being

unaware of previous eradication therapy were independently associated with *H. pylori* infection. Previous triple therapy experience was independently associated with a lower likelihood of infection. Despite prior treatment, approximately 11% of participants remained positive for *H. pylori*.

Conclusion/s: *H. pylori* infection remains common among adults in Thimphu despite declining national prevalence. Younger adults, individuals without previous eradication therapy and population residing in proximity sharing communal sanitation facilities represent important target groups for screening.

Keywords: *Helicobacter pylori; Prevalence; Stool antigen test; Eradication therapy; Bhutan*

MS4-IIB.2 **ORAL PRESENTATION** 1200–1215 · Main Hall-A

Incidence and Risk Factors of In-Hospital Morbidities Related to Excessive Weight Loss among Exclusively Breastfed Infants ≥36 Weeks from an Arid Region: A Prospective Cohort Study

Dr. Neeraj Gupta[1*] *& Ramandeep Kaur*[1]*; Arun Singh*[1]*; Mithu Banerjee*[2] *; Pratibha Singh*[3]

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Background: Excessive postnatal weight loss in exclusively breastfed term and late preterm infants is common and may lead to significant neonatal morbidities. The data on the incidence and determinants of these complications are limited from arid region.

Objective/s: To determine the incidence of morbidities associated with excessive postnatal weight loss and identify maternal and neonatal risk factors among exclusively breastfed healthy infants born at ≥36 weeks' gestation.

Method/s: This prospective cohort study enrolled healthy exclusively breastfed infants ≥36 weeks born at a tertiary centre in Western Rajasthan. Excessive weight loss was defined as >75th centile on Flaherman's nomogram after 24 hours or ≥10% thereafter. Infants meeting these criteria underwent clinical and biochemical evaluation including serum sodium, renal function tests, blood sugar, PCV and serum bilirubin, if icteric. Multivariable logistic regression identified independent risk factors.

Results: Among 2,315 infants analysed, 1,257 (54.3%) developed excessive weight loss and 392 (16.9%) had associated morbidities. Hypernatremia (>145mEq/l) was the commonest morbidity (12.7%), followed by pre-renal azotemia (7.8%) and jaundice requiring phototherapy (4.8%). Independent risk factors included increasing maternal age (adjusted OR 1.05; 95% CI 1.02–1.08), primiparity (adjusted OR for multiparity 0.30), and caesarean birth (adjusted OR 1.31; 95% CI 1.03–1.67). SGA status (adjusted OR 0.46; 95% CI 0.30–0.69) and birth during the humid season (adjusted OR 0.44; 95% CI 0.31–0.61) were protective.

Conclusion/s: Excessive postnatal weight loss and related morbidities are frequent in an arid region. Infants born to older, primiparous mothers by caesarean section require enhanced breastfeeding support and close monitoring for early detection and management of complications.

Keywords: *Excessive weight loss; Breastfeeding; Hypernatremia; Neonatal morbidity; Arid region*

MS4-IIB.3 **ORAL PRESENTATION** 1215–1230 · Main Hall-A

Evidence-Based Model to Address Uncorrected Refractive Error in Bhutan

Mr. Indra P. Sharma[1*]

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Background: Uncorrected refractive error (URE) is the leading cause of vision impairment globally and continues to impose significant social, educational, and economic impact. Despite free refractive error (RE) services in Bhutan, URE remains prevalent, suggesting that barriers beyond service availability contribute to unmet need.

Objective/s: To assess the burden of URE in Bhutan, evaluate the readiness and performance of RE services, and develop and

validate an evidence-based national RE and optical service delivery model to improve effective refractive error coverage (eREC).

Method/s: A mixed-methods, evidence-based public health approach was adopted. Quantitative analyses used nationally representative data from the RARE, Bhutan School Sight Survey, programme reports, and published literature to estimate URE burden, service utilisation, and equity. A health system assessment was conducted using the WHO Refractive Error Services Assessment Tool (RESAT), while a literature review synthesised international RE service delivery models. Findings informed the development of a national service delivery model, which was validated through a two-round Delphi consensus process with Bhutanese experts.

Results: URE remained common across all age groups, with marked geographic and socioeconomic inequities in eREC. Better health system readiness, including governance, workforce, service integration, and monitoring, was associated with higher eREC. No existing service delivery model adequately addressed all performance domains. An evidence-based model was developed and achieved expert consensus.

Conclusion/s: Eliminating URE requires strengthening health system performance and not only service availability. The proposed integrated, evidence-based model provides a sustainable and contextually appropriate framework to improve equitable and sustainable eyecare in Bhutan and similar settings.

Keywords: *Uncorrected refractive error; Effective refractive error coverage; Eye care services; Health systems; Bhutan*

MS4-IIB.4 **ORAL PRESENTATION** 1230–1245 · Main Hall-A

Bhutan-Focused COVID-19 Publications from 2020–2024: A Scopus-Based Bibliometric Analysis

Mr. Zimba Letho[1*]

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Background: The COVID-19 pandemic stimulated unprecedented global research activity. Bhutan, despite its small population and limited research infrastructure, contributed to the COVID-19 related literature.

Objective/s: This study aimed to analyze Bhutan-focused COVID-19 research productivity and scholarly publications using bibliometric analysis.

Method/s: Publications published between 2020 and 2024 were retrieved from Scopus only and analyzed using Microsoft Office Excel 2019 and VOSviewer version 1.6.20.

Results: A total of 60 publications were identified. Research output increased significantly from 6 publications (10%) in 2020 to 18 publications (30%) in 2021, reflecting heightened research engagement during the early phase of the pandemic. The Asia-Pacific Journal of Public Health published the highest number of publications. 18 publications (30%) remained uncited, whereas 9 publications (15%) received 10 or more citations. Bhutan-focused COVID-19 publications emphasized how Gross National Happiness (GNH) principles and cultural values guided the country's public health response to the pandemic.

Conclusion/s: Bhutan-focused COVID-19 publications demonstrated a timely and collaborative research response to the pandemic. While publication output and uptake of open access publishing were encouraging, citation impact remained modest. Enhancing research visibility, dissemination, and indexing may help strengthen the impact of Bhutan-focused research in the future.

Keywords: *Bhutan; COVID-19; Public health research; Research productivity; Research trends*

P

POSTER PRESENTATIONS · DAY 2 · FROM 1600

Poster Abstracts

◆ **Friday, 27 November 2026 · Poster Exhibition Area**

POSTER SESSION

Judges: Poster Presentation Judges (see Annexure A. III)

P-01 **POSTER · SUB-THEME [1–4]** 1600–1640 · Poster Area/Slot: [ICMH2026_P-01]

Beyond Traditional Training: Four Decades of Technology-Assisted Learning for Psychiatry Trainees

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Background: While digital education offers extensive flexibility and accessibility, its efficacy in the nuanced, relationship-driven field of postgraduate psychiatry remains under-explored, despite its established utility in undergraduate training.

Objective/s: This scoping review maps and evaluates the modalities and outcomes of technology-assisted learning in postgraduate psychiatric training, specifically assessing its impact on trainees' knowledge, clinical skills, confidence, and user preferences.

Method/s: A comprehensive search of PubMed, Cochrane, PsycINFO, Scopus, and ERIC (1991–2024) was conducted to identify empirical studies utilizing online or technology-based educational interventions for psychiatry residents. Exclusions applied to non-trainee populations, purely descriptive conceptual papers, non-English texts, and review articles.

Results: Eighty-two articles met the inclusion criteria. The articles were divided into three phases: prior to 2015, 2015 to 2019 (prepandemic), and 2020 onward (postpandemic). A notable publication surge occurred post-2020, with research predominantly originating from Western nations. Five primary technological modalities were identified: videoconferencing, e-learning modules, virtual patients, software applications, and social media. These tools were applied across various domains, including theoretical instruction, clinical skills training, psychotherapy supervision, and information retrieval.

Conclusion/s: Videoconferencing emerged as the most widely implemented modality, followed by e-learning modules and virtual patients. Despite outcome heterogeneity and small sample sizes across the literature, technology-assisted education suggests practical value in advancing psychiatric knowledge and clinical competency. These digital approaches offer a promising and scalable adjunct for the training of future psychiatrists, particularly for bridging educational disparities in low- and middle-income countries.

Keywords: *Psychiatry residency; Digital education; Technology-assisted learning; Postgraduate medical education; Scoping review*

P-02 **POSTER · SUB-THEME [1–4]** 1600–1640 · Poster Area/Slot: [ICMH2026_P-02]

Road Side to Safety: A Fresh Approach to Education of Police Personnel

Dr. Tanvir Samra[1*] *& Amarjyoti Hazareka*[1]*; Jeetinder Kaur*[1]*; Kajal Jain*[1]*; Nidhi Bhatia*[1]*; Shyam Meena*[1]

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Background: Road traffic injuries are a leading cause of death in India, and police personnel are often the first to reach the scene, yet most have no formal training in prehospital trauma care. This study aimed to assess police personnel's knowledge of trauma care and their skill in triaging trauma victims, before and after a training course.

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Objective/s: The aim of this study was to assess the knowledge of police personnel and examine their skill in triaging trauma victims before and after training course.

Method/s: A before-after single-arm pilot study involving a cohort of police personnel was done when training sessions were planned. The questionnaire consisting of 20 items was developed for the study Subjects were imparted didactic lectures on scene safety, patient assessment, airway control, neck stabilisation, bleed control, log roll, monitoring while transportation, and triaging. Skills were demonstrated on 5 skill stations; basic life support, how to stop the bleeding, Cervical spine immobilization, how to remove a helmet, splinting of fracture and transporting trauma victim.

Results: Complete set of pre and post questionnaires could be filled by seventy seven in first training session and fifty three in second training session. Mean age was 42.41± 9.79. More than ninety percent of participants were male (n = 126/135), mean service year was 18.17 ± 9.94 yrs. The overall mean knowledge score increased from 51.84 % before training to 69.20% immediately after training, p =0.01. After training, statistically significant improvements were observed in knowledge score items pertaining to scene management and bleeding. We did not see a significant improvement in section pertaining to management of airway. Only 50% of attendees responded correctly before training and it increased to 55.4% after training (p=0.06)

Conclusion/s: Regular trauma training for police is essential in India. Equipping them with on-site trauma management skills related to airway control is the first step

Keywords: *Prehospital trauma care; Police personnel; First responders; Triage; Training evaluation*

P-03 POSTER · SUB-THEME [1–4] 1600–1640 · Poster Area/Slot: [ICMH2026_P-03]

Proportion of Medication Administration Errors and its Associated Factors Among Nurses at Eastern Regional Referral Hospital, Mongar, Bhutan: A Cross-Sectional Study

Mr. Sanga Tenzin[1*] *& Yeshey Dorjey*[1]*; Hem Kumar Nepal*[1]*; Phuntsho Norbu*[1]*;*

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Background: Medication administration errors (MAE) are among the leading causes of preventable patient harm. In resource-constrained settings such as Bhutan, where nurse staffing density falls well below global averages, this vulnerability may be further amplified.

Objective/s: This study aimed to determine the proportion and factors associated with MAEs among nurses at Eastern Regional Referral Hospital (ERRH).

Method/s: A cross-sectional study was conducted among all nurses involved in medication administration at ERRH between June and July 2026, using a structured, pre-tested, self-administered online questionnaire.

Results: The survey achieved an 87.1% (135/155) response rate. Overall, 28.1% (38/135) of nurses reported experiencing at least one MAE. Forgetting to give medication was the most frequent error type (28.9%), followed by wrong patient, wrong time, and wrong dose (21.1% each) (Figure 1). Crucially, 50% (19/38) of those who experienced an error failed to report it, primarily due to the absence of a clear MAE definition (78.9%) and the lack of a formal reporting system (47.4%) (Figure 2). High workload (75.6% agreement), polypharmacy (64.4% agreement), and workflow interruptions (59.9% agreement) were the most commonly perceived contributing factors (Figure 3). Multivariable logistic regression revealed no statistically significant association between MAE occurrence and individual socio-demographic characteristics ($p > 0.05$).

Conclusion/s: Medication administration errors are common at ERRH, with half remaining unreported. Errors maybe associated with environmental and system-level factors rather than nurse characteristics. Strengthening non-punitive reporting systems, adequate staffing, and strategies to reduce interruptions may improve medication safety.

Keywords: *Medication administration error; Nurses; Patient safety*

P-04 POSTER · SUB-THEME [1–4] 1600–1640 · Poster Area/Slot: [ICMH2026_P-04]

The Silent Rupture: Idiopathic Gastric Perforation in a Preterm Neonate

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Background: Neonatal gastric perforation is a rare, life-threatening surgical emergency with high mortality.

Case Presentation: We report management of preterm male neonate (34+4 weeks, 1.97 kg) admitted with respiratory distress. He received CPAP and full feeds but was intubated at 24 hours due to CPAP failure while continuing feeds. On Day 3, X-ray done for sudden abdominal distension revealed massive pneumoperitoneum, which was managed with bedside peritoneal drain. Emergency laparotomy on Day 4 found a 5cm greater curvature perforation, which was repaired primarily. The baby was ventilated for 7 days, and tapered off oxygen by Day 18. Feeds restarted 5 days post-surgery, and baby reached full feeds in 4 days. Breastfeeding was initiated on Day 16 and baby regained birthweight by Day 23. At discharge on Day 25, he was breastfeeding well and gaining weight.

Discussion: Gastric perforation predominantly affects preterm males, with etiologies including ischemia, distension, muscular defects, NEC, positive pressure ventilation, or traumatic tube insertion, though often no cause is found. Diagnosis relies on pneumoperitoneum and urgent surgery is critical. In our case, CPAP was suspected but given only for one day, and OG tube was correctly positioned on X-ray, ruling out trauma. No features of NEC or anomalies were present. While prematurity and CPAP may have contributed, the primary etiology was not established.

Conclusion/s: Neonatal gastric perforation poses a diagnostic and therapeutic challenge. Clinicians must maintain high suspicion for perforation in neonates with sudden distension, as it may occur without an identifiable cause.

Keywords: *Stomach Rupture; Pneumoperitoneum; Infant, Premature; Continuous Positive Airway Pressure*

P-05 POSTER · SUB-THEME [1–4] 1600–1640 · Poster Area/Slot: [ICMH2026_P-05]

Artificial Intelligence–Assisted Cervical Cancer Screening in Rural Communities: A Sustainable Strategy for Early Detection in Low-Resource Settings

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Background: Despite advancements in medical care and technologies in recent years, cervical cancer continues to be one of the main reasons for deaths from cancers among females living in developing nations. This is attributed to the failure to diagnose in time and poor coverage of screening efforts. In rural and underdeveloped areas, there are deficiencies in skilled cytopathologists, laboratory facilities, and screening initiatives. AI-assisted digital cytology could be a valuable tool in addressing this problem.

Objective/s: To analyze the possible application of AI-assisted cervical cancer screening in enhancing access to health care and diagnostics.

Method/s: Narrative review of literature was performed to analyze relevant peer-reviewed studies related to artificial intelligence in cervical cytology screening during 2018-2026. The PubMed, Scopus, and Google Scholar online databases were searched for articles addressing AI applications in cervical cancer

prevention through the implementation of digital pathology, automated image analysis, telemedicine assistance, and community health programs.

Results: According to current research, AI-based cervical cancer prevention systems are highly accurate with increased speed of diagnostic procedures due to their ability to detect precancerous lesions with great sensitivity. Digital microscopy combined with telecytology allows extending opportunities for remote assistance from specialists, while AI-driven approaches can optimize the process of cervical cancer screening and overcome human resources limitations and costs.

Conclusion/s: AI-assisted cervical cancer screening is a promising approach to enhancing preventive care for women in low-resourced regions. The use of digital pathology along with the organization of community-based screening programs can help reduce the burden of cervical cancer.

Keywords: *Artificial intelligence; Cervical cancer screening; Digital pathology; Community health; Preventive oncology; Telecytology*

P-06 **POSTER · SUB-THEME [1–4]** 1600–1640 · Poster Area/Slot: [ICMH2026_P-06]

Leptospirosis, Routine Activity Loss, and Economic Wellbeing in Rural Sri Lanka

Dr. Sajan P.G Gunarathnage[1*] *& Manojika Jayasinghe*[2]*; Janith Warnasekara*[2]*; Nuwan Wickramasinghe*[2]

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Background: Leptospirosis imposes considerable health and economic burdens in rural Sri Lanka, yet evidence on its disruption of routine activities remains limited.

Objective/s: To estimate productivity loss and associated productivity costs among patients with leptospirosis.

Method/s: A follow-up study enrolled 102 patients diagnosed with leptospirosis and admitted to Teaching Hospital Anuradhapura between January 2025 and July 2026. Loss of routine activities were assessed from symptom onset to first admission and until one week after discharge. Lost days were valued using wage loss, substitute labor cost, public education expenditure, or opportunity cost, according to participants' usual activities. Costs were expressed in 2026 USD.

Results: The mean age was 44.2 years (SD 13.8), and 90 participants (88.2%) were male. Mean monthly household income was USD 312.37 (SD 865.99). Mean disease duration and hospital stay were 16.8 (SD 5.8) and 5.1 days (SD 3.6), respectively. Overall mean productivity loss was 12.0 days (SD 5.6). By activity group, losses were 10.0 days among students (n=4), 13.5 among informal/daily earners (n=47), 8.4 for substitute labour among salaried earners (n=24), 13.7 among dual-income earners (n=21), 5.3 among homemakers (n=4), and 18.5 among unemployed participants (n=2). Mean productivity cost was USD 157.31 (SD 749.92), equivalent to 50.4% of monthly household income. Group-specific costs were USD 34.40, 224.66, 60.07, 100.14, 41.51, and 65.97, respectively.

Conclusion/s: Leptospirosis substantially disrupts routine activities and household economic wellbeing. Strengthening timely diagnosis, patient management, health education, and preventive behavioral and occupational practices may reduce avoidable productivity losses in endemic rural communities.

Keywords: *Leptospirosis; Cost of Illness; Productivity loss; Sri Lanka*

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P-07 **POSTER · SUB-THEME [1–4]** 1600–1640 · Poster Area/Slot: [ICMH2026_P-07]

Comparison of Integrated approach of Yoga Therapy (IAYT) Versus Usual Care in Management of Chronic Low Back Pain using Quantitative Sensory Testing

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Background: Chronic low back pain (CLBP) is associated with central sensitisation, contributing to persistent pain and disability. Although Integrated Approach of Yoga Therapy (IAYT) has demonstrated clinical benefits in CLBP, its effects on objective measures of pain processing assessed by quantitative sensory testing (QST) remain unclear.

Objective/s: This study compared IAYT with usual care in patients with CLBP using QST alongside conventional clinical outcomes.

Method/s: 99 patients were screened, of whom 88 completed study (44 IAYT, 44 usual care). Participants were evaluated at baseline, 4 weeks,12 weeks. Primary outcome was pain intensity measured using Numerical Rating Scale (NRS). Secondary outcomes included pressure pain threshold (PPT), conditioned pain modulation (CPM), Modified Oswestry Disability Index (MODI), EuroQol-5D-5L (EQ-5D-5L).

Results: Baseline demographic and clinical characteristics were comparable between groups. At 12 weeks, IAYT group demonstrated significantly lower pain scores than usual care group (median NRS 6 vs. 7; p=0.026). PPT improved significantly at multiple gluteal and paraspinal sites by 4 weeks, with more widespread improvements at 12 weeks, indicating reduced pain sensitivity. EQ-5D-5L utility index was significantly higher in IAYT group at both 4 and 12 weeks. CPM showed consistent trend towards improvement at 12 weeks, although statistical significance was not reached.

Conclusion/s: IAYT, when added to usual care, provides superior pain relief and improves objective indices of pain sensitivity and health-related quality of life in patients with CLBP. These findings support IAYT as an effective adjunctive, non-pharmacological strategy that may beneficially modulate central pain processing in chronic low back pain.

Keywords: *Low back pain; Yoga; Quantitative sensory testing; Central nervous system sensitization*

P-08 **POSTER · SUB-THEME [1–4]** 1600–1640 · Poster Area/Slot: [ICMH2026_P-08]

Enteral Nutrition Practice and Outcomes at Bhutan's National Referral Hospital: A 16-Month Retrospective Clinical Audit (January 2025 – April 2026)

Tenzin Wangchuk[1*] *& Sherab Lhamo*[1]*; Kinzang Wangmo*[1]*; Sonam Wangmo*[1]*; Kinley Zangmo*[2]*; Pelden Nima*[3]

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Background: Enteral nutrition (EN) is the recommended first-line route of nutrition support for patients with a functioning gut who cannot eat adequately, yet no institutional data on EN practice exist for Bhutan.

Objective/s: This audit described EN prescription practice, the profile and caseload of tube- fed patients, and exploratory outcomes at Jigme Dorji Wangchuck National Referral Hospital (JDWNRH), the country's sole tertiary referral centre.

Method/s: A retrospective audit of the daily EN register was conducted for 1 January 2025 – 30 April 2026. All inpatients who received tube-based EN were included (census sampling). Regimens were classified by protein, fat, and salt content; NP–NF–NS was defined as general-purpose and any other combination as individualised. Data were summarised descriptively. Bivariate tests (chi-square or Fisher's exact; Mann–Whitney U or Kruskal–Wallis) were used to explore associations with EN duration/length of stay (recorded EN ward-days) and transition from a critical-care unit to

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a step-down ward, and an exploratory multivariable negative binomial regression was fitted for EN duration.

Results: A total of 885 patients contributed 14,846 EN ward-days, with a mean of 83.6 patients on EN per month. The median age was 61.5 years (IQR 44–75), 59.3% were male, and 47.8% started EN in a critical-care unit. The leading diagnosis categories were hypertension-related circulatory disease (23.3%) and infections, sepsis and pneumonia (15.5%); stroke was the most frequent comorbidity (23.7%). Of 662 patients with a fully coded regimen, 88.8% received an individualised regimen, rising from 82.3% to 93.2% after a practice change introduced on 1 July 2025. High-protein regimens were less frequent in critical care than in step-down wards (47.5% vs 62.3%), whereas low-protein regimens were more frequent (28.7% vs 14.8%). The median EN duration was 6 days (IQR 3–14; n = 842). The Kruskal–Wallis test showed that EN duration differed by ward of EN start ($H = 25.1$, $p = 0.023$), and the Mann–Whitney U test showed a slightly longer duration with low-fat than with normal-fat regimens (median 7 vs 6 days; $p = 0.010$). Of 422 patients who started EN in critical care, 31 (7.3%) transitioned to a step-down ward. The chi-square test found that transition was more frequent among patients with stroke (15.2% vs 5.5%; $\chi^2 = 8.79$, $p = 0.003$), and Fisher's exact test found associations with malignancy ($p = 0.030$) and diagnosis category ($p = 0.008$); none remained significant after Benjamini–Hochberg correction. In the exploratory multivariable negative binomial regression (n = 620), starting EN in a critical-care unit was associated with a 37% longer mean EN duration (ratio 1.37, 95% CI 1.15–1.64), whereas protein level and regimen type were not.

Conclusion/s: EN prescribing at JDWNRH is highly individualised, but protein provision in critical care falls short of standard clinical recommendations, constrained by formula availability, staffing, and incomplete coding. A weight-based hospital EN protocol, procurement of disease-specific and high-protein formulas, and an enhanced EN register are recommended as the basis for Bhutan's first National Clinical Nutrition Guidelines.

Keywords: *Enteral nutrition; Clinical audit; Critical care; Protein; Nutrition support; Bhutan*

P-09 **POSTER · SUB-THEME [1–4]** 1600–1640 · Poster Area/Slot: [ICMH2026_P-09]

Health Financing Reforms and Out-of-Pocket Spending in South, Southeast, and East Asia: A 12-Country Panel Study, 2000–2023

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Background: Financial protection is a central goal of universal health coverage (UHC), yet South, Southeast, and East Asian countries use markedly different strategies to reduce out-of-pocket (OOP) payment. Comparative evidence linking financing architecture and reforms to OOP spending and population health remains limited.

Objective/s: To examine, whether financing models and major reforms were associated with changes in the OOP share of health spending and in population health outcomes.

Method/s: We assembled a balanced panel of 12 countries over 2000–2023 (N = 288) from World Bank and WHO Global Health Expenditure Database series, classifying countries by financing model and reform period. We used pooled OLS and two-way fixed-effects models with reform pre-period dummies, with wild cluster bootstrap and Callaway–Sant'Anna difference-in-differences robustness checks.

Results: The clearest reform-associated change was in financial protection. Higher government health expenditure was associated with a lower OOP share, and reform pre-periods carried large OOP excesses, implying post-reform reductions, for Thailand (+19.9 points), India (pre-RSBY +26.6), Indonesia (+14.7), Singapore (+14.6), and the Philippines (+5.3). The association was

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marginal under a 12-cluster wild bootstrap (p = 0.072), while a Callaway–Sant'Anna difference-in-differences gave a group-averaged OOP effect of -7.85 points (p = 0.014). Associations with mortality and life expectancy were weaker and not robust.

Conclusion/s: Across these systems, reforms expanding pooled public financing were most consistently associated with improved financial protection, not short-horizon mortality gains. Bangladesh, the only country where the public financing share fell while OOP rose, illustrates that financial protection is not achieved by economic growth alone.

Keywords: *Health financing; Out-of-pocket spending; Financial protection; Universal health coverage; Asia*

P-10 POSTER · SUB-THEME [1–4] 1600–1640 · Poster Area/Slot: [ICMH2026_P-10]

Survival Outcomes Following CRS-HIPEC in Sri Lanka: Extended Follow-Up of a Reconciled First Cohort

Dr. Sampath Herath[1*] *& Jayamal Ariyarathna*[1]*; Niroshan Atulugama*[1]*; Dileepa Mahaliyana*[1]*; Rasitha Manathunga*[1]*; Chiran Rathnaweera*[1]*; Heshan Siriwardena*[1]*; Jayanth Yoganathan*[1]

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Background: Cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (CRS-HIPEC) is established therapy for peritoneal surface malignancy, but no verified outcome data have previously been reported from Sri Lanka. We present the country's first CRS-HIPEC cohort, incorporating newly completed follow-up to extend survival ascertainment.

Objective/s: To report the perioperative mortality and overall survival of the first cohort of patients treated with cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (CRS-HIPEC) in Sri Lanka, and to assess how an additional, systematic follow-up round affected survival estimates in a resource-limited setting.

Method/s: A cohort of 65 consecutive CRS-HIPEC patients from a Sri Lankan tertiary surgical oncology unit was analysed. Surgery dates and follow-up records, including a newly completed telephone follow-up round, were cross-verified to establish vital status and survival duration. Thirty-three percent of patients (22/65) had no verifiable follow-up and were excluded from time-to-event analysis; Kaplan-Meier estimation was applied to the remaining 43 patients, extending observed follow-up to 83 months.

Results: Confirmed 30-day postoperative mortality was 7.7% (5/65), all attributable to early sepsis-related complications. Kaplan-Meier estimated one-year overall survival was 61.8% (one-year mortality 38.2%), with median overall survival of 20.0 months. Survival was 42.0% at two years, 37.4% at three years, and 32.7% at four years, reflecting a longer follow-up window than previously reported. The updated follow-up round both extended confirmed survival for a previously unreachable patient and identified a new death in a patient earlier confirmed alive on chemotherapy, illustrating the value of iterative follow-up in resource-limited cohorts.

Conclusion/s: This first Sri Lankan CRS-HIPEC series demonstrates a 30-day mortality rate broadly comparable to regional experience, with one-year survival of 61.8% and a meaningful cohort of long-term survivors extending beyond four years. Continued structured follow-up remains essential, as a substantial proportion of patients remain lost to contact.

Keywords: *Hyperthermic intraperitoneal chemotherapy; Cytoreduction surgical procedures; Peritoneal neoplasms; Survival analysis; Sri Lanka*

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P-11 POSTER · SUB-THEME [1–4] 1600–1640 · Poster Area/Slot: [ICMH2026_P-11]

From Engagement to Impact: Lessons from Stakeholder and Community Involvement in Respiratory Health Research

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Background: Meaningful stakeholder and community engagement can strengthen the relevance, acceptability and impact of health research. Within the NIHR Global Health Research Unit on Respiratory Health (RESPIRE), a dedicated Stakeholder and Community Engagement Platform (Platform I) has supported locally led engagement in partner countries over 10 years.

Objective/s: The approach aims to ensure that research priorities and design reflect stakeholders' needs and experiences, that local knowledge is valued and integrated into the research cycle, and that evidence is translated into health systems and communities.

Method/s: Platform I's capacity building model combines appointment of local Stakeholder Engagement Champions; guidance on structures, processes and tools; regular facilitated meetings for peer learning and knowledge exchange; tailored mentoring, ongoing reflection and evaluation of impact. Stakeholders engaged across RESPIRE have included patients and the public, healthcare providers, community members and leaders, schools, and multi-sectoral policymakers. Engagement methods ranged from meetings, consultations and advisory groups to co-design workshops, community events, training, policy dialogue and creative approaches to research dissemination. An ongoing evaluation captures who was engaged, activities and inputs, outputs and outcomes, challenges, learning and sustainability, alongside feedback from stakeholders regularly involved with research teams.

Results: Emerging findings and lessons Analysis of 74 reported stakeholder engagements from 17 evaluation forms across five RESPIRE countries indicates that engagement occurred most frequently during data collection, recruitment and research design, which together accounted for approximately 65% of research-stage mentions. Dissemination was also prominent, indicating that teams were bringing stakeholders back into the research process to share and translate findings. Most engagement was with health providers, followed by patients and the public. Using the IAP2 Spectrum of Public Participation, consultation was the most frequently reported level of engagement, followed by involvement and collaboration. No engagement was classified as empowerment, highlighting the challenge of moving from seeking stakeholder perspectives towards building agency so that decision-making shifts to communities within existing research and funding structures. Examples illustrate how engagement has been successfully adapted to different contexts and stakeholder groups. In Malaysia, children and parents refined school-based asthma management guidance, while a chronic respiratory disease Photovoice initiative used patients lived experiences to engage the public, healthcare professionals and policymakers. In Indonesia, students, teachers, school staff and parents co-designed educational materials addressing myths and misconceptions about asthma. In Bangladesh, community priorities were addressed first building trust and longer-term engagement in RESPIRE priorities eg concerns about hygiene in a humanitarian setting, and fear of TB amongst landlords.

Conclusion/s: Meaningful stakeholder and community engagement in research requires a long-term budgetary and management commitment that creates a locally led process that allows for context-sensitive adaptation and builds relationships, trust, capacity and evaluation. RESPIRE guides facilitated the process; cross-country learning enriched it. Moving from informing and consulting

stakeholders to co-creating and empowering requires engagement to be embedded throughout the research cycle. Evaluation must focus on impact on research, inclusivity, and reciprocity: what do stakeholders gain from their engagement?

Keywords: *Stakeholder engagement; community engagement and involvement; respiratory health; patient and public involvement; global health; RESPIRE.*

P-12 POSTER · SUB-THEME [1–4] 1600–1640 · Poster Area/Slot: [ICMH2026_P-12]

Improving Completeness of Trauma Assessment and Documentation in Emergency Department of National Referral Hospital

Dr. Amber B. Mongar[1*] *&*
Kinzang Dema[2]*; Loday Drakpa*[2]*; Karma Yangchen*[2]*; Thinley Pelden*[1]*; Pema Yangchen*[2]*; Tsundreuel Kuenchap Wangchug*[2]*; Ugyen Dorji*[1]*; Tandin Wangchuk*[2]*; Sherab Wangdi*[2]

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Background: Systematic trauma assessment using the Advanced Trauma Life Support (ATLS) XABCDE primary survey, secondary survey and AMPLE history allows early identification of life-threatening injuries. In busy Emergency Departments (EDs), assessment and documentation are often incomplete. A baseline audit in the ED of Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) found complete trauma assessment documented in only 28.6% of patients.

Objective/s: To increase the proportion of trauma patients receiving complete trauma assessment and documentation from 28.6% to more than 80% within eight weeks.

Method/s: An eight-week quality improvement project using four Plan-Do-Study-Act (PDSA) cycles was conducted in the ED. Baseline records of 14 trauma patients were audited against ten ATLS-based components, and a staff survey assessed knowledge, practice and barriers. Root causes were analysed using fishbone, five-whys and Pareto analysis. Sequential interventions were: (1) continuing medical education and staff sensitisation; (2) laminated ATLS-based XABCDE posters at the trauma bay; (3) a dedicated trauma trolley with colour-coded drawers arranged in XABCDE sequence; and (4) a standardised ATLS-based trauma assessment template in the electronic Patient Information System (ePIS). The process indicator was the percentage of trauma patients with complete assessment documentation.

Results: Most staff had good knowledge (62%), and the mean self-reported practice score was 4.2/5 (85.5%); high patient volume and time constraints were the main barriers. Exsanguinating haemorrhage screening, the secondary survey and AMPLE history were the most often missed components (42.8% complete). Complete documentation rose from 28.6% to 33.3% after education, 41.2% after posters, 75.0% after the trauma trolley (the largest gain, 33.8 percentage points) and 85.0% after the ePIS template, exceeding the 80% target..

Conclusion/s: Small, sequential PDSA cycles tripled complete trauma assessment documentation within eight weeks. System changes, particularly the trauma trolley and electronic template, had a greater effect than education alone. Regular audit, orientation of new staff and evaluation of missed injuries as a balancing measure are recommended to sustain and confirm the improvement.

Keywords: *Quality improvement; Wounds and injuries; Emergency service, hospital; Documentation; Bhutan*

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ANNEXURE

Conference Officials, 10th ICMH 2026

◆ Includes Scientific Committee, Oral & Poster Judges

I. Scientific Committee Members

#	Name	Role · Faculty / Agency / Organisation
1	**Dr. Nidup Dorji**	**Chairperson** – FNPH, KGUMSB
2	**Mr. Rixin Jamtsho**	**Vice Chair** – MECRIT, KGUMSB
3	**Mr. Tshering JAMTSHO**	**Member Secretary** – RID-MECRIT, KGUMSB
4	**Dr. Sonam Chhoden R**	**Member** – FoUGM, KGUMSB
5	**Mr. Zimba Letho**	**Member** – FNPH, KGUMSB
6	**Dr. Manikala Moktan**	**Member** – FNPH, KGUMSB
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12	**Dr. Bikram Chhetri**	**Member** – JDWNRH
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14	**Mr. Tenzin Wangchuk**	**Member** – JDWNRH
15	**Mr. Hari P. Sharma**	**Member** – DoPH, MoH
16	**Mr. Kinley Dorjee**	**Member** – HIRD, MoH
17	**Mr. Tashi Norbu**	**Member** – MECRIT, KGUMSB
18	**Mr. Sonam Phuntsho**	**Member** – Planning Unit, KGUMSB
19	**Ms. Tshering Choden**	**Alternate Member** – BICC, RID-MECRIT, KGUMSB
20	**Ms. Sonam Pelmo**	**Alternate Member** – RID-MECRIT, KGUMSB
21	**Mr. Thinley Jamtsho**	**Conference Event Management System Expert & Support –** ICT Division, OOP, KGUMSB
22	**Mr. Dechen Wangdi**	**Conference Event Management System Exert & Support** – FoPGM/BHJ, KGUMSB
23	**Ms. Tshewang Lhamo**	**Admin Support** – CPD, MECRIT, KGUMSB

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II. Oral Presentation Judges

1	Mr. Wangchuk (Assistant Professor), Public Health & Allied Health Sciences, FNPH, KGUMSB
2	Dr. Phillip Erbele (Research Specialist), Research & Innovation Division, MECRIT, KGUMSB
3	Dr. Namkha Dorji (Gynecologic Oncologist & Obstetrician), JDWNRH
4	Dr. Bikram Chhetri (Psychiatrist), Psychiatry Dept., JDWNRH
5	Ms. Tshering Dema (Dy. Nursing Superintendent), Nursing Dept., JDWNRH
6	Drg. Singye Wangmo (Drungtsho Tsozin-wom), National Traditional Medicine Hospital (NTMH), MoH

III. Poster Presentation Judges

1	Dr. Manikala Moktan (Assistant Professor), Nursing Department, FNPH, KGUMSB
2	Dr. Sonam Choden R (Dy. Dean of Academic Affairs), FoUGM, KGUMSB
3	Drg. Jamyang Y Dorji (Lecturer), FoTM, KGUMSB
4	Ms. Yeshey Zangmo (Professor/Dy. Dean), Faculty of Nursing & Health Sciences, RTC
5	Mr. Tashi Norbu (Chief Program Officer), CPD, MECRIT, KGUMSB
6	Dr. Rojna Rai (Obstetrician & Gynecologist), Obstetrics & Gynecology Dept., JDWNRH

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