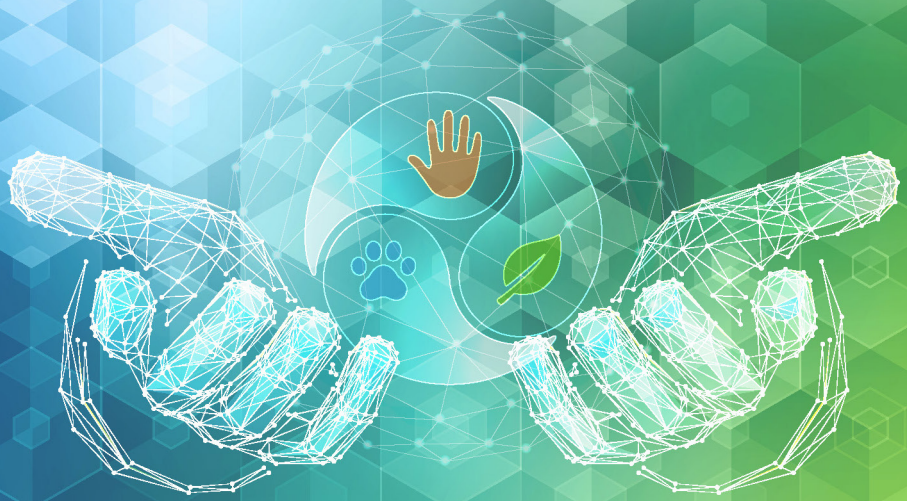
IMEC 2024

17th International Medical Education Conference

Hybrid Conference



TRANSFORMING HEALTH PROFESSIONS EDUCATION FOR ADVANCEMENT OF ONE HEALTH

4 - 6 October 2024

Organised by:

IMU UNIVERSITY

Formerly known as
International Medical University

Supported by:

amee
The International Association for Health Professions Education

APBSEA

IAMSE

AFMHE

Malaysia Convention & Exhibition Bureau

Meet in Malaysia
BE Greater, Together.

Malaysia Truly Asia

ABOUT IMEC 2024

The 'One Health' approach addresses human, animal, plant, and environmental health sectors collectively. The interdependencies between these sectors require a multisectoral, transdisciplinary and integrated approach. One Health involves the evaluation and monitoring of the impact of environmental hazards on healthcare systems, public health, biodiversity, and food security. This concept requires a unique blend of interdisciplinary knowledge and skills, which can be challenging to integrate into the traditional academic setting.

Creating educational programs that integrate knowledge and practices of multiple disciplines to improve human, animal, and environmental health is the essence of One Health curriculum design. Teaching and learning and student assessment within the context of One Health is significant because it prepares students and professionals to address complex health issues that span the interconnected domains of human, animal, and environmental health. Digital health technologies can significantly enhance the effectiveness of One Health initiatives in various ways including digital transformation through the implementation of a comprehensive health and life sciences strategy. Faculty development is a critical component in effectively implementing the One Health approach.

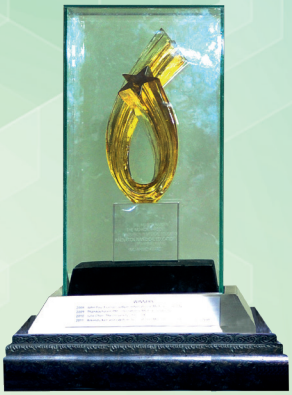
IMEC 2024 aims to empower healthcare professionals to catalyse transformative change in the way health and wellness are being currently defined. The conference explores curricula, teaching-learning methods, assessment tools, professionalism, and digital health concepts in the One Health context.

THE IMU-RON HARDEN INNOVATION IN MEDICAL EDUCATION AWARD (IMU-RHIME AWARD)

The IMU-Ron Harden Innovation in Medical Education Award was introduced with IMEC-2008 to fulfill two objectives:

1) To encourage innovations in medical education (medical = health professions)
2) To recognise innovations by academics which otherwise might go unnoticed

The award honours Professor Ronald Harden who played a crucial role in the inception of the International Medical University; and is a prestigious award because Ron is widely accepted as a "guru" in medical education worldwide. It carries a rolling trophy and cash prize of RM2,000.



IMU RHIME PAST WINNERS

2008 - John Paul Judson
International Medical University, Malaysia

2009 - Thanikachalam, Sri Kumar Chakravarthi, A.Tay and Vijay Singh
International Medical University, Malaysia

2010 - Julie Chen, Diane Salter and LC Chan
University of Hong Kong

2011 - (6th AMEA Symposium) Arkendu Sen and Lakshimi Selvaratnam
Monash University Sunway Campus, Malaysia

2012 - (15th Ottawa Conference) Maria Ahmed
Imperial College London, United Kingdom

2013 - Muhamad Saiful Bahri Yusoff, Mohd Hamil Yaacob, Syed Hatim Noor and Abd Rahman Esa
Universiti Sains Malaysia, Kelantan, Malaysia

2014 - Romesh P Nalliah
Harvard School of Dental Medicine, Massachusetts, United States of America

2015 - Arkendu Sen and Lakshimi Selvaratnam
Monash University Sunway Campus, Malaysia

2016 - Chris O'Callaghan and Chris Williams
Institute of Child Health, University College London, United Kingdom

2017 - Prashanti Eachempati, Sumanth KN and Abd Rashid Hj Ismail
Melaka Manipal Medical College, Malaysia

2018 - Regi Septian, Tjahjodjati and Kuncoro Adi
Padjadjaran University, Indonesia

2019 - (10th AMEA Symposium) Madawa Nilupathi Chandratilake, Dilmini Karunaratne, Gamini Wijayarathna, Thashika Rupasinghe and Chamli Pushpakumara
University of Kelaniya, Sri Lanka

2020 - (19th Ottawa Conference) Elizabeth Wenghofer, Robert Steele, Tammy Wagner, Peter Yu and Nancy Dickey
Texas A&M University College of Medicine, United States

2021 - Nurhanis Syazni Roslan, Muhamad Saiful Bahri Yusoff, Karen Morgan, Asrenee Ab Razak and Nor Izzah Ahmad Shauki
Universiti Sains Malaysia, RCSI-Perdana University & Ministry of Health Malaysia, Malaysia

2022 - Vasudeva Rao Avupati, Mallikarjuna Rao Pichika, Mohd Zulkefeli, Lee Choy Sin, Zabibah binti Ibrahim and Hasnain Zafar Baloch
International Medical University, Malaysia

2023 - Enoch Chan
The University of Hong Kong

17TH INTERNATIONAL MEDICAL EDUCATION CONFERENCE (IMEC 2024)

ORGANISING COMMITTEE

INTERNATIONAL ADVISOR
Vishna Devi Nadarajah
Newcastle University Medicine Malaysia (NuMED)

ADVISOR
Er Hui Meng
Pro Vice-Chancellor, Education

CHAIR
Heethal Jaiprakash
School of Medicine and Learning Resources

SECRETARY
Norul Hidayah Mamat @ Muhammad
IMU Centre for Education

SECRETARIATS
Nur Haslina Kamarudin
IMU Centre for Education

Maithili Ratnam
IMU Centre for Education

Liong Siao Lin
IMU Centre for Lifelong Learning

Janet Foo Wei Sum
IMU Centre for Lifelong Learning

Noor Farahanna Aima Binti Muhd Asri
IMU Centre for Lifelong Learning

Brindha Chellappan
IMU Centre for Lifelong Learning

Pritha A/P Sukumaran
IMU Centre for Lifelong Learning

Kashi Devi A/P Nachemanil
Chancellery

SUB COMMITTEE – FINANCE
Sanjitha A/P T Mathialagan
Finance Department

SUB COMMITTEE – VIRTUAL PLATFORM
Mohd Fadzil bin Zainal Anuar
E-Learning Department

SUB COMMITTEE- VIDEOGRAPHY & DESIGN
Muhammad 'Azizi bin Che Sulaiman
E-Learning Department

SUB COMMITTEE – IT AV
Mohd Rizal bin Abdul Kahar
IT Department

Muhammad Rashidi bin Rahmat
IT Department

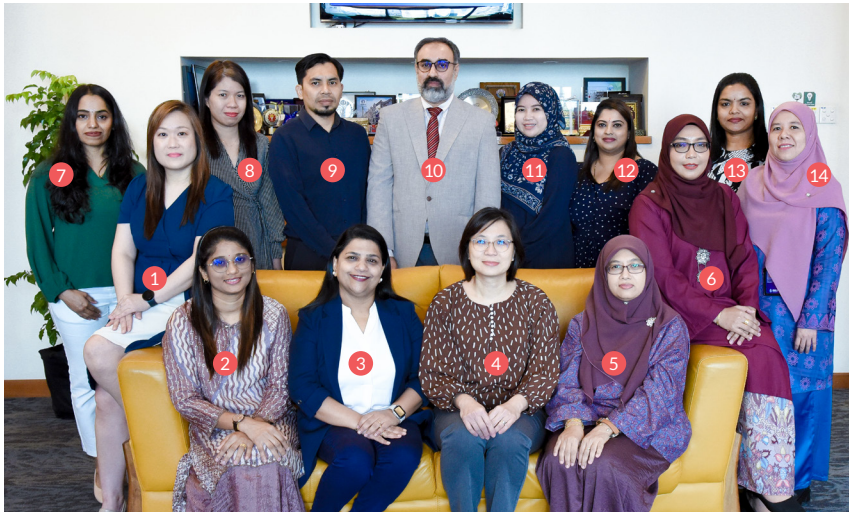
SUB COMMITTEE – REFRESHMENT
Koh Yen Lin
Facilities and Management Department

SUB COMMITTEE- PHYSICAL ARRANGEMENT
Nor Shahril bin Mat Sohor
Facilities and Management Department

SUB COMMITTEE- ACCOMMODATION AND TRANSPORTATION
Aini Rafizah binti Abdul Aziz
Facilities and Management Department

SUB COMMITTEE - WEBSITE
Nor Zamielia binti Zainuddin
Marketing and Enrolment Office

SUB COMMITTEE- SPONSORSHIP
Hasnain Zafar Baloch
E-Learning Department



FRONT ROW FROM LEFT

1 Janet Foo Wei Sum 2 Maithilli A/P Ratnam 3 Heethal Jaiprakash 4 Er Hui Meng
5 Norul Hidayah binti Mamat @ Muhammad 6 Nur Haslina binti Kamarudin

BACK ROW FROM LEFT

7 Brindha Chellapan 8 Liong Siao Lin 9 Muhammad 'Azizi bin Che Sulaiman
10 Hasnain Zafar Baloch 11 Noor Farahanna Aima Binti Muhd Asri
12 Vikneswary A/P Gunalan 13 Kashi Devi A/P Nachemanil 14 Nor Zamielia binti Zainuddin

---

NOT IN THE PHOTO

Vishna Devi Nadarajah | Mohd Fadzil bin Zainal Anuar | Mohd Rizal bin Abdul Kahar |
Muhammad Rashidi bin Rahmat | Koh Yen Lin | Nor Shahril bin Mat Sohor |
Aini Rafizah binti Abdul Aziz | Pritha A/P Sukumaran

17TH INTERNATIONAL MEDICAL EDUCATION CONFERENCE (IMEC 2024)

SCIENTIFIC COMMITTEE

ADVISORS

Nilesh Kumar Mitra
Teaching and Learning

CHAIR

Bhavani Veasuvalingam
IMU Centre for Education

SECRETARY

Siti Suriani binti Abd Razak
IMU Centre for Education

SECRETARIAT

Rohayati binti Raben
IMU Centre for Education

Abdul 'Azim bin Roslan
IMU Centre for Education

Khadhijah binti Md San
Teaching and Learning

MEMBERS

Chen Yu Sui
Human Biology

Sow Chew Fei
Teaching and Learning

Wong Pei Se
Teaching and Learning

Ebenezer Chitra
Teaching and Learning

Pathiyil Ravi Shankar
IMU Centre for Education

Adlina Suleiman
Healthcare Management

Juliet Mathew
Clinical Skills and Simulation Centre

Thiba Rajoo A/P M P Rajoo
Pathology

Muneer Gohar Babar
Clinical Oral Health Sciences

Megan Chong
Nutrition & Dietetics

SUPPORT STAFF

1. Rajajivan A/L Mariarockiam
2. Farhatun 'Amaliyyah binti Ab Murad
3. Mohd Lazry bin Abdul Latif
4. Nazrul Aizat bin Musarudin
5. Nurman Effendy bin Mohd Asmuni
6. ITS Support and Services

FRONT ROW FROM LEFT

1 Rohayati binti Raben 2 Wong Pei Se 3 Bhavani Veasuvalingam

4 Er Hui Meng 5 Siti Suriani binti Abd Razak 6 Khadhijah binti Md San

BACK ROW FROM LEFT

7 Juliet Mathew 8 Thiba Rajoo A/P M P Rajoo 9 Pathiyil Ravi Shankar

10 Abdul 'Azim bin Roslan 11 Ebenezer Chitra 12 Sow Chew Fei 13 Chen Yu Sui

---

NOT IN THE PHOTO

Nilesh Kumar Mitra | Adlina Suleiman | Muneer Gohar Babar | Megan Chong

CONTENTS

WELCOME MESSAGE FROM THE VICE-CHANCELLOR

IMU UNIVERSITY

It is with immense pleasure and pride that I welcome you to the 17th International Medical Education Conference (IMEC) 2024. The conference has garnered tremendous interest among health professions educators globally since it was first convened in 2004. IMEC has been a platform for participants from diverse countries to connect, engage, and network at local, regional, and international levels. It has been an avenue for research collaborations and intellectual dialogue across countries. This year's conference is of particular significance as we gather under the theme "Transforming Health Professions Education for the Advancement of One Health." This theme reflects the evolving landscape of health professions education and underscores our commitment to addressing the complex and interdependent challenges of the 21st century through a One Health approach.

As we embark on this exciting journey at IMEC 2024, it is important to highlight a pivotal development at our institution. The International Medical University (IMU) has recently undergone a significant rebranding, marking a new chapter in our commitment to excellence in education, research, and service. Central to this rebranding is our new mission, to ignite a paradigm shift in the One Health concept, which encompasses human, animal, and environmental health to address global health challenges in innovative and impactful ways.

The COVID-19 pandemic has starkly demonstrated the need for a One Health approach. The pandemic, which likely originated from zoonotic transmission, has highlighted the vulnerabilities in our current health systems and the urgent need to rethink how we manage the health of people, animals, and our planet. It has become evident that human health cannot be separated from animal health or environmental health, and that we must adopt a more holistic and integrated approach to health management. Your participation in this conference is a testament to your commitment to this cause, and we look forward to your valuable contributions.

IMEC 2024 provides a unique platform for health professionals, educators, researchers, and students from around the world to come together and share their knowledge, experiences, and insights on how to transform health professions education to advance One Health .The conference will feature a diverse range of plenaries, symposia, workshops and panel discussions that will explore innovative approaches to health education, interdisciplinary collaboration, and integrating One Health principles into curricula and practice.

As we gather for IMEC 2024, let us remember the lessons learned from the COVID-19 pandemic and renew our commitment to advancing health professions education in a way that is responsive to the needs of our communities and the planet. Let us embrace the One Health approach as a guiding principle for our work and strive to create a future where the health of people, animals, and ecosystems is protected and sustained.

I would like to express my gratitude to all the delegates, speakers, and participants for joining us at IMEC 2024. Your presence and contributions make this conference a success, and I am confident that the discussions and collaborations that take place here will not just have a lasting impact but will shape the future of health professions education in a profound and inspiring way.

I would also like to thank the organising and scientific committee chairs and members for their hard work and dedication in putting together this remarkable event. I also want to thank the reviewers and judges for the oral and e-poster presentations and the chairpersons and moderators for their contributions. IMEC 2024 is a testament to what we can achieve when we work together towards a common goal, and I am excited to see the outcomes of this conference.

Thank you, and I wish you all a productive and inspiring conference.

Academician Professor Emerita
Datuk Dr Asma Ismail
Vice-Chancellor

WELCOME MESSAGE FROM THE CONFERENCE ORGANISING CHAIR

IMU UNIVERSITY

It is with great pleasure that I extend a warm welcome to the International Medical Education Conference (IMEC) 2024. As the Organizing Chair of this prestigious event, I am truly honored to be part of a gathering that promises to push the boundaries of health professions education, bringing together minds from across the globe to collaborate, innovate, and transform.

This year's conference theme, "Transforming Health Professions Education for the Advancement of One Health," is both timely and crucial. In the face of global health challenges, the concept of One Health, an integrated approach that recognizes the interconnection between human, animal, and environmental health has never been more relevant. As educators, researchers, and practitioners, our role in advancing this concept through education cannot be overstated. This conference provides a unique platform to explore how we can better prepare future health professionals to work within this framework, ensuring that they are equipped to meet the complex needs of a rapidly changing world.

We are incredibly fortunate to have around 350 participants from 33 countries joining us this year, making IMEC 2024 a truly international event. This year's hybrid format, allowing both physical and virtual participation, reflects our commitment to inclusivity and accessibility. It recognizes the evolving landscape of conferences in the post-pandemic world and leverages technology to ensure that geographical boundaries do not limit participation. We hope that this format will foster even greater engagement and collaboration among participants.

I would like to extend my appreciation to the organising committee members, the chair, and the members of the scientific committee, whose expertise has shaped the conference, ensuring it is both cutting-edge and impactful. I would like to take this opportunity to express my deepest gratitude to those who have made IMEC 2024 possible. Firstly, to our distinguished speakers, facilitators, session chairs, moderators, and judges, thank you for your invaluable contributions. Our reviewers, whose diligent work in evaluating the numerous submissions ensures the high quality of the presentations and discussions we will witness. Our sponsors also deserve heartfelt thanks for their support in making this conference possible.

I would also like to acknowledge the contributions of the student helpers, who have assisted in various capacities. Your enthusiasm and hard work are truly appreciated, and we are grateful for your contributions. Behind the scenes, several departments have played a crucial role in ensuring the smooth running of this conference. The e-Learning, IT, Finance, and Facilities Management departments have provided invaluable support, from technical logistics to ensuring that every participant's experience is seamless and enjoyable.

I would like to reiterate my heartfelt thanks to all participants, contributors, and supporters of IMEC 2024. Your commitment to advancing health professions education is inspiring, and I am confident that together, we will make this conference a resounding success.

Once again, welcome to IMEC 2024. Let us make this a memorable and transformative experience.

Associate Professor Dr Heethal Jaiprakash
Conference Organising Chair
IMEC 2024

KEYNOTE
THE UNITY OF HEALTH: EMBRACING THE ONE HEALTH PARADIGM

Date: 5 October 2024 Time: 1330 - 1410 Venue: Mei Ling Young Auditorium 2, Level 4

This keynote address will delves into the transformative potential of the One Health paradigm in health profession education. Medical education is the process of training and educating individuals to become skilled health practitioners to provide high-quality health services. The 'One Health' approach addresses human, animal, plant, and environmental health sectors collectively. Using The COVID-19 pandemic, as an example of major Public Health thread, underscored the critical importance of the One Health concept.

The SARS-CoV-2 virus, likely originating from bats and transmitted to humans, rapidly spread worldwide, exposing our vulnerability to zoonotic diseases. The pandemic demonstrated that disruptions in ecosystems can facilitate the spillover of pathogens from animals to humans. Embracing the One Health approach is crucial for preventing and managing such pandemics, ensuring comprehensive health for all living beings.

Interprofessional education involving healthcare providers for humans, animals and plants and experts on environmental heath may be the right direction for training of personnels to prevent and deal with such calamities. Therefore, it is crucial that the Medical Education integrates knowledge and practices of multiple disciplines to address complex health issues to improve human, plant, animal, and environmental health. The Digital health significantly enhanced the effectiveness of Medical Education and One Health in managing COVID-19.

COVID-19 has illustrated the global chaos that can be unleashed by this newly emerging infectious disease. Malaysia has taken unhesitating and revolutionary health emergency initiatives, across multiple sectors to manage this catastrophic situation. A multi-sectoral and collaborative approach, in line with whole-of-government, whole-of-society and One Health approaches have been implemented. The year 2024 gives better bright life prospects. Battle is still on.

Professor Datuk Dr Rohaizat Yon
Professor in Public Health & Consultant Public Health Physician

Board of Governors, Management & Science University (MAU)

Former Deputy Director-General of Health (Medical), Ministry of Health Malaysia

PRE CONFERENCE WORKSHOPS

PRE-CONFERENCE PROGRAMME

FRIDAY, 4 OCTOBER 2024 | DAY 1

TIME	PROGRAMME	VENUE
0900-1200	**Pre-Conference Workshop - P1a (Onsite)** **Title: Innovative Strategies to Enhance Student Engagement with One Health in Competency-Based Medical Education - Plans & Perspectives of Educators Vs Students** **Facilitators:** *Krishna Mohan Surapaneni (India), Jyotsna Needamangalam Balaji (India), Russel D'Souza (Australia), Mary Mathew (India)* **Moderator:** *Sunil Pazhayanur Venkateswaran*	1.12.02, Level 1
	Pre-Conference Workshop - P1b (Onsite) **Title: Moving from Policy to Practice to Tackle Microaggressions** **Facilitators:** *Joanne Selway, Jacqueline O'Dowd (United Kingdom)* **Moderator:** *Muneer Gohar Babar*	1.12.03, Level 1
	Pre-Conference Workshop - P1c (Onsite) **Title: Global Health Professionals in 2030: Building Your Center of Excellence** **Facilitators:** *Avinash Pathengay, Snigdha (India), Chen Zhi Xiong (Singapore)* **Moderator:** *Fabian Davamani Amalraj*	1.12.06, Level 1
	Pre-Conference Workshop - P1d (Onsite) **Title: Do We Need OSCE to Show Competency of Novice to Mastery?** **Facilitators:** *Kavitha Nagandla, Sharifah Sulaiha Syed Aznal, Malanashita Ganeson, Brinnell Annette, Clarence Kavetha (Malaysia)* **Moderator:** *Megan Chong*	1.12.08, Level 1
	Pre-Conference Workshop - P1e (Onsite) **Title: How to Use Generative AI to Transform Health Professions Education for the Advancement of One Health** **Facilitators:** *Weeming Lau (Malaysia), Andrew Tagg (Australia)* **Moderator:** *Pathiyil Ravi Shankar*	1.12.09, Level 1
	Pre-Conference Workshop - O1a (Online) **Title: Transcending Boundaries: Integrating One Health for Holistic Patient Wellness - Enhancing Clinical Skills** **Facilitators:** *Sara Shakil, Iffat Khanum, Kiren Habib (Pakistan)* **Moderator:** *Bhavani Veasuvalingam*	1.12.01, Level 1 Online

TIME	PROGRAMME	VENUE
	Pre-Conference Workshop - O1b (Online) **Title: Rigor Rises: A Medical Education Research Odyssey** **Facilitators:** *Syeda Hanaa Fatima, Naushaba Sadiq, Sajida Naseem (Pakistan)* **Moderator:** *Sasikala Devi Amirthalingam*	1.12.07, Level 1 Online
1200-1345	**LUNCH BREAK**	**OPEN AREA 1**
1300-1400	**IMU Clinical Skills and Simulation Centre & Medical Museum Tour**	CSSC, Level G
1400-1700	**Pre-Conference Workshop - P2a (Onsite)** **Title: Developing Interdisciplinary Programs in Integrative Health** **Facilitators:** *Amanda Huee-Ping Wong , Long Yun Chau, Zhi Xiong Chen, Ivan Low Cherh Chiet (Singapore)* **Moderator:** *Kavitha Nagandla*	1.12.02, Level 1
	Pre-Conference Workshop - P2b (Onsite) **Title: Leveraging AI Tools and Technologies for Digital Health Education** **Facilitators:** *Gunasekar Thangarasu, Fabian Davamani Amalraj, Tan Ee Xion (Malaysia)* **Moderator:** *Pathiyil Ravi Shankar*	1.12.09, Level 1
	Pre-Conference Workshop - P2d (Onsite) **Title: 'It's Not My Fault'- Attribution Theory in Healthcare Professionalism Assessment** **Facilitators:** *Dominic Johnson (United Kingdom)* **Moderator:** *Juliet Mathew*	1.12.08, Level 1
	Pre-Conference Workshop - P2e (Onsite) **Title: Interprofessional Team Building in One Health Landscape Through Gamification** **Facilitators:** *Rabia Aftab, Aliya Ahmed, Shaur Sarfaraz, Aun Ali (Pakistan)* **Moderator:** *Sow Chew Fei*	1.12.03, Level 1

FRIDAY, 4 OCTOBER 2024 | DAY 1

TIME	PROGRAMME	VENUE
1400-1700	**Pre-Conference Workshop - O2a (Online)** **Title: Effective Communication in Multicultural Health Care Environment; Empowering the One Health System** **Facilitators:** *Magda Ahmed Wagdy Youssef, Manasik Hassan (Qatar)* **Moderator:** *Thiba Rajoo*	1.12.01, Level 1 Online
	Pre-Conference Workshop - O2b (Online) **Title: Designing the Future of One Health Education: An Interdisciplinary Challenge** **Facilitators:** : *Melvyn Quan, Heleen Roos, Sean Patrick, Sumaiya Adam (South Africa)* **Moderator:** *Ebenezer Chitra*	1.12.07, Level 1 Online
1800-2100	DINNER (BY INVITATION)	

MAIN CONFERENCE

DAY 2

MAIN CONFERENCE PROGRAMME

SATURDAY, 5 OCTOBER 2024 | DAY 2

TIME	PROGRAMME	VENUE
0800-1030	Registration	Foyer, Level 4
0930-1030	**Oral Presentation Session 1.1 (Online)**	1.12.01
	Oral Presentation Session 1.2 (Online)	1.12.04
	Oral Presentation Session 1.3 (Online)	1.12.05
	Oral Presentation Session 1.4 (Online)	1.12.10
	E-Poster Presentation Session 1.1 (Online)	1.12.11
	E-Poster Presentation Session 1.2 (Online)	MR2
1030-1130	**Oral Presentation Session 2.1**	1.12.02
	Oral Presentation Session 2.2	1.12.03
	Oral Presentation Session 2.3	1.12.06
	Oral Presentation Session 2.4	1.12.07
	Oral Presentation Session 2.5	1.12.08
	Oral Presentation Session 2.6	1.12.09
	Oral Presentation Session 2.7	1.12.12
	Oral Presentation Session 2.8	1.12.13
	E-Poster Presentation Session 2.1	1.06.14-15
	E-Poster Presentation Session 2.2	1.06.16-17
	E-Poster Presentation Session 2.3	1.06.18-19
	E-Poster Presentation Session 2.4	1.06.20-21
1130-1200	Networking & Visit Sponsor Page/ Exhibition Booths	Foyer & Dewan Chancellor, Level 4
1200-1300	**LUNCH BREAK, IMU CLINICAL SKILLS AND SIMULATION CENTRE & MEDICAL MUSEUM TOUR**	
1300-1305	**Welcome Address** *Heethal Jaiprakash (Organising Chair)*	Mei Ling Young Auditorium 2, Level 4
1305-1315	Opening Ceremony	

TIME	PROGRAMME	VENUE
1315-1330	**Opening Address** *Academician Professor Emerita Datuk Dr Asma Ismail (Vice Chancellor, IMU)*	Mei Ling Young Auditorium 2, Level 4
1330-1410	**Keynote Address** **Title: The Unity of Health: Embracing the One Health Paradigm through Public Health** *Professor Datuk Dr Rohaizat Yon (Malaysia)* Chairperson: *Lokman Hakim Sulaiman*	Mei Ling Young Auditorium 2, Level 4
1410-1455	**Plenary 1** **Title: Health in Harmony: Infusing the One Health Paradigm into Modern Education** *Vishna Devi Nadarajah (Malaysia)* Chairperson: *Nilesh Kumar Mitra* Moderator: *Ebenezer Chitra*	
1455-1505	Photography Session	
1505-1535	**TEA BREAK**	**FOYER & DEWAN CHANCELLOR, LEVEL 4**
1535-1620	**Plenary 2** **Title: United by Health: Navigating Interprofessional Learning in the One Health Landscape** *Gary Rogers (Australia)* Chairperson: *Yawar Hayat Khan* Moderator: *Norul Hidayah*	Mei Ling Young Auditorium 2, Level 4
1620-1720	**Symposium 1a** **Title: One Health in Anatomy Teaching: Journey from Interprofessional Education to Digital Technology** *Choy Ker Woon (Malaysia), Nilesh Kumar Mitra (Malaysia), Lakshmi Selvaratnam (Malaysia)* Chairperson: *Sow Chew Fei* Moderator: *Juliett Matthew*	Mei Ling Young Auditorium 2, Level 4

MAIN CONFERENCE PROGRAMME

SATURDAY, 5 OCTOBER 2024 | DAY 2

TIME	PROGRAMME	VENUE
1620-1720	**Symposium 1b** **Title: From Silos to Synergy: Enhancing Health Profession Education through One Health Curriculum Design** *Mohamad Nurman Yaman (Malaysia), Rohini Karunakaran (Malaysia), Mohamad Nurman Yaman (Malaysia)* Chairperson: *Siti Suriani Abd Razak* Moderator: *Megan Chong*	Mei Ling Young Auditorium 1, Level 4
1720-1820	**Symposium 2a** **Title: Challenges of Faculty Development in the Era of GenAI: Advancing the One Health Agenda** *Muhammad Tariq (Pakistan), Muhamad Saiful Bahri Yusoff (Malaysia), Mahwish Arooj (Pakistan)* Chairperson: *Ian Symonds* Moderator: *Pathiyil Ravi Shankar*	Mei Ling Young Auditorium 2, Level 4
	Symposium 2b **Title: Empowering Students through experiential learning:** **A Case Study of Advancing Planetary Health via Student-led Hackathon** *Tharanga Thoradeniya (Sri Lanka), Piyusha Atapattu (Sri Lanka), Ashvni Chadrakumar (Sri Lanka)* Chairperson: *Lim Chooi Ling* Moderator: *Wong Pei Se*	Mei Ling Young Auditorium 1, Level 4
1820-1920	**Symposium 3a** **Title: One Health, Holistic Care: Integrating Lifestyle Medicine into Health Professions Education** *Rehmah Sarfraz (Pakistan), Tahira Sadiq (Pakistan), Maqsood ul Hassan (Pakistan).* Chairperson: *Seow Liang Lin* Moderator: *Adlina Suleiman*	Mei Ling Young Auditorium 2, Level 4
	Symposium 3b **Title: Educating (Health) Students and Practitioners to Empower Less Privileged Communities and Nations to Address One Health and Climate Change** *Anshu (India), Pathiyil Ravi Shankar (Malaysia), Saroj Jayasinghe (Sri Lanka)* Chairperson: *Azhar Rashid* Moderator: *Juliet Mathew*	Mei Ling Young Auditorium 1, Level 4

TIME	PROGRAMME	VENUE
1820-1920	**Symposium 3c (Online)** **Title: One Health: Are Cultural Differences in Professional Standards a Barrier to Progress?** *Kamran Sattar (UAE), Kate Owen (United Kingdom), Lindsay Muscroft (United Kingdom)* Chairperson: *Thiba Rajoo* Moderator: *Jaiprakash Monharaj*	ICE Training Room Level 2, Online
1920-2100	**WELCOME RECEPTION**	**DEWAN CHANCELLOR, LEVEL 4**

MAIN CONFERENCE

DAY 3

MAIN CONFERENCE PROGRAMME

SUNDAY, 6 OCTOBER 2024 | DAY 3

TIME	PROGRAMME	VENUE
0830-1000	Registration	Foyer, Level 4
1000-1100	**Panel Discussion** **Title: Empowering Tomorrow's Health Professionals: Insights from Global Health Challenges** *Wilfredo Fernando Cortizo (Indonesia), Syed Mohamed AlJunid (Malaysia), Chen Zhi Xiong (Singapore)* Chairperson: *Bhavani Veasuvalingam* Moderator: *Raheela Yasmin*	Mei Ling Young Auditorium 2, Level 4
	Oral Presentation Session 3.1	1.12.02
	Oral Presentation Session 3.2	1.12.03
	Oral Presentation Session 3.3	1.12.06
	Oral Presentation Session 3.4	1.12.07
	Oral Presentation Session 3.5	1.12.08
1100-1145	**Plenary 3** **Title: Bridging the Human-Animal Interface: Pioneering One Health Education Across Health Professions** Speaker: *Kamalan Jeevarathnam (United Kingdom)* Chairperson: *Sharifah Sulaiha Syed Aznal* Moderator: *Malaika Watanabe*	Mei Ling Young Auditorium 2, Level 4
1145-1300	**IMU-Ron Harden Innovation in Medical Education (IMU – RHIME) Presentations** Chairperson: *Er Hui Meng* Moderator: *Siti Suriani Abd Razak*	
1300-1400	LUNCH BREAK, NETWORKING & VISIT SPONSOR PAGE/ EXHIBITION BOOTHS	FOYER & DEWAN CHANCELLOR, LEVEL 4
1400-1445	**Plenary 4** **Title: Leading the Way: Excellence in One Health Leadership** Speaker: *Ronald Harden (United Kingdom)* Chairperson: *Vishna Devi Nadarajah* Moderator: *Wong Pei Se*	Mei Ling Young Auditorium 2, Level 4

TIME	PROGRAMME	VENUE
1445-1545	**Panel Discussion** **Title: Integrating One Health Principles in Assessing Student Well-Being: A Holistic Approach in Health Professions Education** *Rehan Ahmed Khan (Pakistan), Haslee Sharil Lim Abdullah (Malaysia), Arunthathi Mahendran (United Kingdom)* Chairperson: *Er Hui Meng* Moderator: *Muneer Gohar Babar*	Mei Ling Young Auditorium 2, Level 4
1545-1610	**Presentation of Awards for Oral, E-Poster & IMU-Ron Harden Innovation in Medical Education (IMU-RHIME)** **Closing Remark by (Organising Chair)**	Mei Ling Young Auditorium 2, Level 4
1610-1710	**TEA BREAK & END**	**DEWAN CHANCELLOR & FOYER, LEVEL 4**

PLENARIES

PLENARY 1

Health in Harmony: Infusing the One Health Paradigm into Modern Education

Date: 5 October 2024
Time: 1410 - 1455
Venue: Mei Ling Young Auditorium 2, Level 4

Sypnosis

This plenary session will delve into the practicality of implementing One Health principles in health professional education. A comprehensive insight on strategies to seamlessly integrate the core tenets of One Health into curricula, ensuring that future healthcare leaders are equipped with the One Health competencies for a holistic and interconnected approach to planetary well-being. Strategies, case studies, and success stories, demonstrating how breaking down traditional silos to foster collaborative learning to have a shared responsibility among healthcare professionals are discussed.

Professor Vishna Devi Nadarajah
Provost & CEO
Newcastle University Medicine Malaysia

PLENARY 2

United by Health: Navigating Interprofessional Learning in the One Health Landscape

Date: 5 October 2024
Time: 1535 - 1620
Venue: Mei Ling Young Auditorium 2, Level 4

Sypnosis

This plenary session delves into the strategies and frameworks that unite diverse healthcare professionals in a collaborative effort towards planetary well-being. In the fourteen years since the Sydney Interprofessional Declaration, and despite significant setbacks during the global pandemic, there has been an increasing recognition of the importance of health professionals acquiring and utilising specific collaborative capabilities to optimise the safe and effective care of their patients and clients. This discourse has, however, focused primarily on the coordinated provision of health care, with less emphasis on health promotion, disease prevention and the structural determinants of health. The One Health concept rightly focuses on these critically important perspectives, which will markedly impact the health of humans and all of Earth's organisms in the decades ahead. This plenary will explore opportunities for the interprofessional education movement and the One Health paradigm to come together for the benefit of this planet and all of its inhabitants into the future.

Professor Gary Rogers
Dean of School of Medicine,
Deakin University, Australia

PLENARY 3

Bridging the Human-Animal Interface: Pioneering One Health Education across Health Professions

Date: 6 October 2024
Time: 1100 - 1145
Venue: Mei Ling Young Auditorium 2, Level 4

Sypnosis

This plenary session provides a comprehensive overview, shedding light on the essence of collaboration between the human and animal interface through health professions education and research activities. The plenary aims to address the integrated efforts to monitor, prevent, and respond to health threats such as zoonotic diseases transmitting between humans and animals.

Professor Kamalan Jeevarathnam
Head of School of Veterinary Medicine,
Professor in Clinical Physiology
University of Surrey, United Kingdom

PLENARY 4

Leading the Way: Excellence in One Health Leadership

Date: 6 October 2024
Time: 1400 - 1445
Venue: Mei Ling Young Auditorium 2, Level 4

Sypnosis

This closing plenary offers insight on the role of leadership in propelling forward a unified, One Health agenda, illustrating of how effective leaders successfully can break down silos, foster collaboration, and champion interdisciplinary initiatives from the perspectives of health professions education. This dynamic session urges the leaders to harness their influence as catalysts for positive change, thus steering our global community towards a healthier, interconnected future.

Professor Ronald Harden
Professor (Emeritus) Medical Education, University of Dundee, United Kingdom

PANEL DISCUSSION

PANEL DISCUSSION

Date: 6 October 2024
Time: 1000 - 1100

Synopsis for Panel Discussion

This panel discussion critically examines the pressing health challenges facing global communities, with a primary focus on health economics and the necessary policy changes to effectively tackle a range of issues from infectious diseases to mental health crises and environmental risks. The role of integrative and complementary medicine within the One Health framework is explored, where the significance of combining traditional medical practices with holistic and alternative approaches can enhance health outcomes not just for humans, but also for animals and the environment, fostering a more comprehensive approach to global health. The pivotal role of educators in developing curricula that embed One Health competencies, with strategies for training healthcare professionals who are equipped to deal with complex health issues through interdisciplinary and collaborative methods.

Chairperson: A/P Bhavani Veasuvalingam
Moderator: Prof Raheela Yasmeen

Panellist:

- Prof Syed Mohamed Aljunid Bin Syed Junid
  (Health Economics, Policy and Management)
- Dr Fernando Cortizo
  (Integrative and Complementary Medicine)
- Prof Chen Zhi Xiong
  (Medical Curriculum Development)

PANEL DISCUSSION

Panellist Biography:

Professor Emeritus Dato' Dr Syed Mohamed Aljunid
Public Health Medicine Consultant
Professor of Health Economics, Policy and Management ,
Department of Public Health and Community Medicine,
School of Medicine, IMU University, Malaysia

Professor Emeritus Dato' Dr. Syed Mohamed Aljunid is a distinguished Public Health Medicine Consultant and Professor of Health Economics, Policy and Management in Department of Public Health and Community Medicine, IMU University, Malaysia. He has a rich academic background including a PhD in Health Economics and Financing from the London School of Hygiene and Tropical Medicine, an MD from the National University of Malaysia, and a Master of Science in Public Health from the National University of Singapore. With over 30 years of expertise in research and development in health policy, economics and financing, he has held prominent positions such as Founding Head of the International Centre for Casemix and Clinical Coding at the Faculty of Medicine UKM, Senior Research Fellow at the United Nations University International Institute for Global Health and Founding Chair of Health Policy and Management, Faculty of Public Health, Kuwait University. Notably, he was honoured with the title of Emeritus Professor in Public Health by the Faculty of Medicine at the National University of Malaysia in November 2022. Dr. Aljunid's international impact is evident through his consultancy work for prestigious organizations including the WHO, World Bank, AUSAID, GIZ and Asian Development Bank, where he has contributed to the development and implementation of casemix systems for provider payment methods in Social Health Insurance programs across various countries. Moreover, his involvement as Co-chair of the Morbidity Technical Advisory Group for the ICD-11 Revision underscores his significant contributions to global health classification standards. With a prolific publication record exceeding 300 journal articles, books, book chapters, and scientific reports, along with over 350 presentations at local and international conferences, and more than 90,000 citations with h-index of 70, Dr. Aljunid continues to be a leading figure in advancing the field of public health and health economics on a global scale. He has conducted more than 50 research projects, supervised 46 PhD candidates and 150 Master students.

PANEL DISCUSSION

Dr Wilfredo Fernando Cortizo

Executive Director AGAPE ATP Corporation USA
International Business Director My Life Center (MLC) Malaysia
Director of Academic Affairs, School of Integrative Medicine Department, Medical Faculty UNIPRIMA University Medan Indonesia

Dr Cortizo completed his studies at Monash University in the Biochemistry Department at the Faculty of Medicine, where he became a member of the Diabetes Research Group and was trained in the area of Endocrinology, specializing in Insulin action and Insulin receptors in muscle. He was also involved in collaborative research in the USA at the Department of Pathology, University of Pennsylvania, Philadelphia, followed by an appointment as Head of the Teaching laboratories, Department of Biochemistry at La Trobe University, Bundoora.

He held the position of Senior Research Officer at the Department of Medicine, Alfred Hospital Monash Medical School and then joined the Commonwealth Serum Laboratories (CSL) of Australia as a Protein Chemist, thereafter progressing to the position of Product Specialist, Manager and Project Manager, in the manufacture and introduction of new pharmaceutical products and clinical trials assessing new treatment protocols for Haemophilia and blood disorders.

In the last 30 years he has been actively involved in the fields of microbiology and biotechnology. Most notably, in the development of microbiological products for human consumption (probiotics) and environmental bioremediation

Dr Cortizo was instrumental in the establishment and development of The Graduate School of Integrative and Environmental Medicine, Swinburne University (GSIM) and contributed to the growing use and acceptance of integrative medicine in Australia. He served as a Senior lecturer and Director of Research Development at GSIM and as an Integrative Medicine Consultant to Pathlab in Melbourne and ADL in the USA.

Dr Cortizo was a regular lecturer at the General Practitioners Conference and Exhibition (GPCE) and an active member and lecturer at the American Academy of Antiaging (A4M) and The Australasian Academy of Antiaging Medicine(A5M).

He was the Director of International Business for Goodgene Inc, Korea and Director and CEO of YourGene LLC., USA, Nxgene Malaysia and Indonesia Compounding Pharmacies. Currently he is the Executive Director for AGAPE ATP Corporation USA, International Business Director My Life Center (MLC) Malaysia and Director of Academic Affairs, School of Integrative Medicine Department, Medical Faculty UNIPRIMA University Medan Indonesia.

PANEL DISCUSSION

Prof Chen Zhi Xiong

Assistant Dean (Education) of NUS Medicine
Associate of the Centre for Medical Education (CenMED)
National University of Singapore Yong Loo Lin School of Medicine, Singapore

Zhi Xiong obtained his PhD from the NUS Graduate School of Integrative Sciences and Engineering. He completed his fellowship with Ludwig Cancer Research at Karolinska Institutet and obtained his Master of Health Professions Education from Maastricht University. Currently, he is Assistant Dean (Education) of NUS Medicine and an Associate of the Centre for Medical Education (CenMED). Deeply interested in international professional development, he is Chairperson of the Asia-Pacific Biomedical Science Educators Association (APBSEA) and a Board Member of the International Association of Medical Science Educators (IAMSE). In pediatric cancer research, Zhi Xiong is seeking new therapies and new ways of treating and monitoring disease as Principal Investigator of the Neurodevelopment and Cancer Laboratory at NUS Centre for Cancer Research (N2CR). He is also an Affiliate Member of the National University Cancer Institute, Singapore (NCIS) and a Joint Scientist at KK Women's and Children's Hospital (KKH). Involved in the education of medical, dental and life sciences students, Zhi Xiong is exploring ways to broaden health professions education and promote transdisciplinary learning with specific interests in the role of medical sciences in health professions practice, faculty development, and medical education technology. As Master of NUS LightHouse and ex-NUS Assistant Dean of Students, Zhi Xiong firmly believes that education goes hand in hand with holistic student development and champions innovative ways to foster academic and non-academic learning.

PANEL DISCUSSION

Date: 6 October 2024
Time: 1445 - 1545

Synopsis for Panel Discussion

The panel discussion highlights the importance of adopting a multidisciplinary approach in assessing student well-being within health professions education. By integrating One Health principles, educators can foster a holistic approach that considers the interconnectedness of human, animal, and environmental health. Through this lens, student assessment extends beyond academic achievement to encompass mental health, social connection, and physical wellness, reflecting the broader context of health professions education. By embracing this holistic approach, educators empower students to become agents of positive change, contributing not only to their own well-being but also to the health of communities and ecosystems.

In this session Prof Arunthathi will explore on the definition of resilience, ethical considerations of assessing students' resilience at admission. She will also discuss on the Asian and Western conception of resilience: tension and contradiction. Prof Sharil will be discussing the impact of technology and social media on resilience, developing curriculum and assessment and support system that helps students to build EQ/SQ/HQ. Finally, Prof Rehan will describe on the design of assessments taking into consideration of students' wellbeing.

Chairperson: Prof Er Hui Meng
Moderator: Prof Muneer Gohar Babar

Panellist:

- Prof Arunthathi Mahendran
- Prof Haslee Sharil Lim Abdullah
- Prof Rehan Ahmed Khan

PANEL DISCUSSION

Panellist Biography:

Prof Arunthathi Mahendran
Director, Institute for Health Sciences Education
Honorary Consultant Transplant Surgeon
Barts Health NHS Trust
Faculty of Medicine & Dentistry
Queen Mary University of London

Arunthathi Mahendran is Director of the School of Medicine (IHSE) and Professor of Education at the Faculty of Medicine and Dentistry, Queen Mary University of London, built on the historic foundations of St. Bartholomew's Hospital Medical College and the London Hospital Medical College. Arunthathi combines her academic and education research commitments with a clinical practice as a Consultant Transplant Surgeon at Barts Health Trust. Access to learning through equity of opportunity and inclusive education are at the heart of all her endeavours.

She undertook her specialist abdominal transplant surgery training at the Royal Free Hospital in London and Columbia University/New York Presbyterian Medical Centre in Manhattan, New York. Prior to this, she was an ethics fellow at the Clinical Medical Ethics programme at the University of Chicago. She completed a PhD in Education at Goldsmiths', University of London, and was the 2018 Winner of the (BERA) British Educational Research Association Doctoral Thesis Award. Her research interest explores the philosophy of practices of thinking, knowing and doing across disciplines in professional medical and clinical education. She is the author of, 'Moments of Rupture: the importance of affect in medical education and surgical training', (Routledge 2019) which explores how surgeons make sense of clinical events of practice. Her research has garnered her an international reputation as a pioneer in affect theory within medical curriculum and healthcare education. In 2021, Queen Mary University awarded her the President and Principal's Prize for excellence in education in recognition of her multiple innovations in healthcare education which led to the transformation of how patient care is delivered in East London communities.

PANEL DISCUSSION

Prof Haslee Sharil Lim Abdullah

Dean, School of Psychology and Social Sciences,
IMU University, Malaysia

A renowned and respected counselor and counselor educator in Malaysia. He has vast experience in the education profession since 1977 after going through the grinds of being a schoolteacher, counseling teacher, senior assistant teacher, lecturer, senior lecturer, associate professor, and professor. As an academician, he had served University of Malaya and Universiti Sains Islam Malaysia for 27 years before joining IMU in November 2023 and appointed as the Dean, School of Psychology and Social Sciences. For several years, he was a national committee member of Mental Health Promotion: Healthy lifestyle campaign launched by Ministry of Health circa 2000. He was a Lembaga Kaunselor board member in 2010 and awarded as one of the TOKOH KAUNSELING in 2016. His expertise is in empowering individuals to enhance their resilience by applying the counseling trilogy he has developed, namely Acceptance, Forgiveness, and Gratitude (AFG). He views most mental health issues rooted in humanity matters. He treats love and compassion, kindness, mercifulness, and graciousness as the core of re-humanizing the dehumanized.

Prof Rehan Ahmed Khan

Dean, Riphah Institute of Assessment
Professor of Surgery at Islamic International Medical College,
Riphah International University Pakistan

Dr. Rehan Ahmed Khan is a distinguished figure in the field of medical education and surgery, currently holding multiple key positions in academia and healthcare. As of May 2024, he serves as the Dean of Riphah Institute of Assessment at Riphah International University. In addition to his deanship, Dr. Khan also serves as the Director of Medical Education and holds the position of Head of Department (HOD) and Professor of Surgery at the Islamic International Medical College, Riphah International University. He teaches and supervises students in masters in medical education at University of Warwick, University of Lahore and Riphah International University.

Dr. Khan's commitment to advancing medical education is evident through his role as the Chief Editor of the Health Professions Educator Journal, where he contributes to shaping the discourse in the field. His extensive educational journey has equipped him with a diverse set of skills and knowledge. He earned his PhD in Medical Education from Maastricht University in the Netherlands in July 2021, complementing his earlier

PANEL DISCUSSION

achievements, such as the Master of Health Professions Education (MHPE) from Riphah International University in 2016 and the MSc in Health Professions Education from the University of Glasgow in December 2014.

His rich work history reflects his progressive career trajectory. His interests in medical education include Artificial intelligence, Assessment and Curriculum and has published several articles in these domains.

Dr. Khan's surgical expertise is underscored by his attainment of the FRCS (General Surgery) from the Royal College of Surgeons of Ireland in September 2003 and the FCPS (General Surgery) from the College of Physicians and Surgeons, Pakistan, in April 2003. He initiated his medical journey with an MBBS degree from Rawalpindi Medical College, Punjab University, Pakistan, graduating in June 1998.

With a comprehensive background in both medical practice and education, Dr. Rehan Ahmed Khan stands as a driving force in shaping the future of healthcare professionals and fostering excellence in medical education.

SYMPOSIUM

SYMPOSIUM 1A

One Health in Anatomy Teaching: Journey from Interprofessional Education to Digital Technology

Date: 5 October 2024
Time: 1620 - 1720
Venue: Mei Ling Young Auditorium 2, Level 4

Symposia Synopsis

Anatomy education in the integrated curriculum of Malaysian Universities has undergone a transformative shift, and apart from being integrated with other disciplines in the medical and health sciences program, it serves as a bridge for interprofessional collaboration among students and faculty from diverse healthcare disciplines. With the increase in zoonotic diseases and changing ecological dynamics, there is a growing recognition of the need to incorporate One Health and comparative medicine into medical education. The One Health approach in medical education crosses trans-disciplinary boundaries while embracing applied anatomical concepts and comparative approaches. This leads to a comprehensive understanding of health and disease from basic sciences to applied pathology. Interdisciplinary programs such as Elective and Clinical Anatomy programs have been introduced in the Universities, with teaching and learning from surgeons, radiologists, forensics, and others. Through collaborative learning experiences, students gain a deeper understanding of the anatomical structures and functions, fostering a comprehensive perspective essential for addressing complex medical diseases. Innovative integrated e-learning technologies offer effective tools to host joint One Health stakeholder interactions within conducive collaborative spaces to facilitate collaborative networks.

This symposium explores the interprofessional teaching of anatomy with innovative pedagogical approaches, integration of comparative anatomy within human medical training and utilization of a technology-based E-Learning Anatomy Lab to enable professional competencies for veterinary and healthcare personnel.

SYMPOSIUM 1A

Speaker 1:

Dr Choy Ker Woon
Senior Lecturer, Department of Anatomy, Faculty of Medicine, University Teknologi MARA (UiTM), Sungai Buloh Campus, Selangor; Institute of Pathology, Laboratory and Forensic Medicine, Universiti Teknologi MARA (UiTM), Malaysia.
choykerwoon@uitm.edu.my

Presentation Synopsis

Interprofessional and Innovation in Anatomy Teaching within One Health Framework.
In recent years, the intersection of interprofessional collaboration and innovative teaching methodologies has become increasingly pertinent in the field of anatomical education, especially within the context of One Health initiatives. This abstract presents an overview of the experiences and insights gained from the implementation of interprofessional and innovative approaches to anatomy teaching at Universiti Teknologi MARA (UiTM) within the framework of One Health. At UiTM, anatomy teaching has undergone a transformative shift, embracing interdisciplinary collaboration and innovative pedagogies to address the complexities of contemporary healthcare challenges. By integrating the principles of One Health, a holistic approach emphasizing the interconnectedness of human, animal, and environmental health, UiTM has initiated novel strategies to enhance anatomical education. Central to UiTM's approach is the cultivation of interprofessional collaboration among students and faculty from diverse healthcare disciplines. Interdisciplinary program was introduced such as Elective program and Clinical Anatomy program with teaching and learning from surgeon, radiologist, forensic and others. Through collaborative learning experiences, students gain a deeper understanding of the anatomical structures and functions, fostering a comprehensive perspective essential for addressing complex medical diseases. Innovative pedagogy, such as Anatomy Clinic, Young Anatomist ExploRACE program, e-Anatomy kit and problem-based learning, have been integrated into the anatomy teaching and learning to promote active engagement and critical thinking among students. Our research showed that this innovative pedagogy provided students with immersive learning experiences that transcend traditional classroom boundaries. The UiTM experience underscores the transformative potential of interprofessional collaboration and innovation in anatomy teaching within the context of One Health. Anatomical education within the One Health paradigm, encouraging students to consider the broader implications of their professional roles in promoting health equity, environmental sustainability, and animal welfare.

SYMPOSIUM 1A

Speaker 2:

Prof Dr Nilesh Kumar Mitra
Dean, Teaching and Learning, IMU University; Professor, Anatomy, School of Medicine, IMU University, Malaysia.
NileshKumar@imu.edu.my

Presentation Synopsis

Bridging Medicine and Environment: Integrating Comparative Anatomy in Human Health.

The history of medicine underscores the profound influence of environmental factors on human health, a principle epitomized by Hippocrates, the father of medicine. Today, amidst the rise of zoonotic diseases and shifting ecological dynamics, there is a growing recognition to incorporate One Health and comparative medicine into medical education. This symposium presentation explores the integration of comparative anatomy within human medical training to elucidate complex anatomical variances and their clinical implications. Beyond its historical roots, the relevance of comparative anatomy is underscored by its practical applications. Animal models, such as the Charles Spaniel dogs, offer invaluable insights into human conditions like Arnold-Chiari malformation, shedding light on structural defects of the brain. Furthermore, the mechanical nuances of vertebral column function, notably between biped humans and quadruped mammals, highlight the importance of understanding species-specific adaptations and vulnerabilities. The biochemical disparities observed across species present unique clinical challenges. For instance, while chocolates pose no harm to humans, they can be toxic to dogs due to enzymatic differences, emphasizing the critical role of comparative anatomy in veterinary medicine and pet care. Human and cow nervous systems react differently to prion proteins, causing Mad Cow Disease or Bovine Encephalopathy in cows and Creutzfeldt-Jacob disease in humans.

By embracing applied anatomical concepts and comparative approaches, medical education can cross disciplinary boundaries and foster a holistic understanding of health and disease. Through this symposium presentation, we delve into the potential of integrating comparative anatomy in human medicine, highlighting pathways towards enhanced clinical practice and ecological stewardship.

SYMPOSIUM 1A

Speaker 3:

Assoc. Prof Dr Lakshmi Selvaratnam
Associate Professor of Anatomy, Jeffrey Cheah School of Medicine and Health Sciences
Monash University Malaysia, Malaysia.
lakshmi.selvaratnam@monash.edu

Presentation Synopsis

Utilisation of a Technology-based E-Learning Lab to Facilitate One Health Initiatives.

Although the development of One Health strategies in healthcare education linking human and animal health with their shared environment is recognized as imperative, approaching relevant health education and research from non-conventional perspectives can be fraught with challenges. In order to address complex issues such as zoonotic diseases and emerging infections, diverse viewpoints and skills must be engaged through interdisciplinary and cross-sectoral cooperation. Hence, innovative integrated technologies may offer effective tools to host joint One Health stakeholder meetings within conducive collaborative spaces to facilitate planning processes, build strong collaborative networks and enable frank discussions towards holistic solutions (Yopa et al., 2023).

One such case study is highlighted involving the utilization of a technology-based E-Learning Anatomy Lab to conduct a stakeholder forum on zoonotic disease education, specifically on Brucellosis. Persistent and endemic to Malaysia and South-east Asia, eradication of Brucellosis, a bacterial zoonotic disease affecting humans and livestock, remains a serious challenge with associated economic losses (Franc et al, 2018). A stakeholder's forum on Brucellosis was carried out in our e-Learning Lab to determine the prevailing knowledge, attitudes and perception of experts and public stakeholders. Using the said facility, facilitator-led discussions were semi-structured and recorded, and later transcribed and thematically analysed.

As key stakeholders were involved, this One Health initiative should be able to inform future veterinary and public health policy in the country and enable the development of fit-for-purpose professional competencies for veterinary and healthcare personnel, with a goal to eradicate Brucellosis. In our experience, utilising the Anatomy Lab involves a sociotechnical approach (Scott et al., 2023) wherein work practice involves a network of people, tools and a process of structured/ focused discussion and action generation in an enabling, conducive environment. In conclusion, having One Health approaches at the community/ national level requires such exemplars of cooperative and focused stakeholder engagement enabled by technology-backed infrastructure to advance effective ecosystem solutions.

SYMPOSIUM 1B

From Silos to Synergy: Enhancing Health Profession Education through One Health Curriculum Design

Date: 5 October 2024
Time: 1620 - 1720
Venue: Mei Ling Young Auditorium 1, Level 4

Symposia Synopsis

In response to the growing recognition of the interconnectedness of human, animal, and environmental health, the symposium "From Silos to Synergy: Enhancing Health Profession Education through One Health Curriculum Design" aims to explore innovative strategies for integrating One Health principles into health profession education. Experts in curriculum development, assessment, and interprofessional education will present insights and best practices, covering topics such as curriculum design, assessment methods for evaluating One Health competencies, and interprofessional collaboration. Through engaging presentations and interactive discussions, participants will gain practical knowledge and resources for redesigning health profession curricula to promote a holistic understanding of health and wellness. The symposium offers networking opportunities for educators, researchers, and practitioners interested in advancing One Health education in the health professions. This symposium promises an enriching event where delegates can learn how to redesign their teaching methods and prepare future healthcare professionals to tackle complex health issues from the One Health lens.

Speaker 1:

Assoc Prof Dr Mohamad Nurman Yaman
Department of Medical Education, Faculty of Medicine, Universiti Kebangsaan Malaysia, Cheras, Kuala Lumpur, Malaysia
mdnurman@gmail.com

Presentation Synopsis

Breaking Down Barriers: Innovative Curriculum Design for One Health Integration

This talk explores innovative approaches to curriculum design that facilitate the integration of One Health principles into health profession education. Drawing from the experience in curriculum development, this talk discusses strategies for breaking down disciplinary barriers and fostering interdisciplinary collaboration among students and faculty. Through evidence and case studies, this talk highlights best practices for

SYMPOSIUM 1B

designing curricula that promote a holistic understanding of health and address the interconnectedness of human, animal, and environmental health.

Speaker 2:

Snr Assoc Prof Dr Rohini Karunakaran
Unit of Biochemistry & Medical Education, Deputy Dean Academic & International Affairs, Faculty of Medicine, AIMST University, Malaysia,
rohinik23@gmail.com

Presentation Synopsis

Assessing One Health Competencies: Tools and Methods for Effective Evaluation

This talk focuses on the development and implementation of assessment tools and methods to evaluate students' understanding of One Health principles and their proficiency in applying these principles in practice. Various approaches to assessing One Health competencies, including written assessments, practical examinations, and performance-based evaluations will be discussed. This talk also shares insights into the challenges and opportunities associated with assessing interdisciplinary knowledge and skills in health profession education.

Speaker 3:

Dr Galvin Sim Siang Lin
DDS (USM), MScD (USM), MMedEd (UM), PhD (USM), Dip PCD RCSI, MFD RCSI, MFDS RCPSG, MFDS RCSEd, FDTFEd
Department of Restorative Dentistry, Kulliyyah of Dentistry,
International Islamic University Malaysia, Kuantan Campus, Malaysia
galvin@iium.edu.my

Presentation Synopsis

Building Bridges: Interprofessional Education and Collaboration in One Health

This talk explores the importance of interprofessional education and collaboration in addressing complex health challenges through the One Health approach. Strategies for fostering collaboration between health professions and integrating interdisciplinary perspectives into educational programs will be discussed. Drawing from research and experience, this talk shares practical tips and recommendations for promoting teamwork, communication, and shared decision-making among healthcare professionals working in diverse settings

SYMPOSIUM 2A

Challenges of Faculty Development in the Era of GenAI: Advancing the One Health Agenda

Date: 5 October 2024
Time: 1720 - 1820
Venue: Mei Ling Young Auditorium 2, Level 4

Symposia Synopsis

Internationally the concern for advanced faculty training for understanding the connectiveness between health and environment is gaining momentum. With the rapid influx of different tools of generative Artificial Intelligence (GenAI) the task of faculty development has become more complex. It is imperative to ensure that generative AI training is incorporated in interdisciplinary training of faculty embracing GenAI. It is important to realize that although GenAI models are very useful technological tools however they are not free from biases and ethical issues. Judicious use of GenAI for adopting One Health can develop better collaboration and integration of expertise to achieve optimal health outcomes for all. Faculty development in the context of One Health focuses on enhancing the knowledge, skills, and competencies of educators and researchers to effectively teach, research, and promote the One Health approach.

Speaker 1:

Dr Muhammad Tariq
Vice Dean, Medical College & Professor of Medicine,
Yasmin & Shaukat Ali Jessani Endowed Chair, Pakistan
International Regional Advisor of the Royal College of Physicians of Edinburgh

Presentation Synopsis

Challenges of Gen AI training for Clinical Practitioners

The Generative AI is a reality in medicine and to keep pace with this recent advance, clinical practitioners need to be aware of it and should be using in their clinical practice. There are however several challenges, which clinical practitioners may face in utilizing this technology because of complex nature of health care and the unique requirements of the clinical practice. The technical expertise required to understand the underlying algorithms and mechanisms of GenAI systems is new for the practitioners and there is a need to bridge this gap by educating them on AI concepts, machine learning, and deep

SYMPOSIUM 2A

learning algorithms, how to handle patient data securely and ethically when using GenAI as well as enhancing model interpretability and transparency, enabling clinicians to trust and validate AI-driven insights. There may be biases present in the training data in AI models. Clinical practitioners need to be aware of these biases so that they can respond accordingly. Clinical practitioners need to be trained on how to communicate complex AI-generated recommendations to patients in a clear and understandable manner. Patients may struggle with understanding genetic concepts, requiring practitioners to educate and counsel them effectively. Implementing GenAI demands significant resources, necessitating training to advocate for and utilize these resources effectively.

Multidisciplinary approach involving collaboration between healthcare professionals, AI researchers, and all the other stakeholders is required to address these challenges.

Speaker 2:

Assoc Prof Dr Muhamad Saiful Bahri Bin Yusoff
M.D (USM), MSc (Medical Education, USM), PhD (Medical Education, USM)
Director of Center for the Development of Academic Excellence (CDAE) &
Associate Professor at the Department of Medical Education, School of Medical Sciences,
Universiti Sains Malaysia
msaiful_bahri@usm.my

Presentation Synopsis

Humanization of Generative AI for One health

This talk explores the synergy between Generative Artificial Intelligence (AI) and One Health, emphasizing the importance of humanization in this fusion. Generative AI's ability offers unique opportunities for addressing complex health professions education challenges. However, as we harness AI's potential, it's crucial to ensure human values and ethical considerations guide its development and application. The talk delves into strategies for responsible AI innovation, interdisciplinary collaboration, and ethical deployment in One Health contexts based on the insights from the best evidence and practices. Moreover, it also serves as a platform for delegates to exchange ideas and forge collaborations towards a more human-centred approach to leveraging AI for global health and well-being. It is strongly believed that humanizing Generative AI can drive transformative change in One Health initiatives.

SYMPOSIUM 2A

Speaker 3:

Prof Mahwish Arooj
Principal and Director DED
University College of Medicine and Dentistry
The University of Lahore, Pakistan

Presentation Synopsis

Development of Policies for judicious use of GenAI

Artificial Intelligence (AI) and more specifically Generative Artificial Intelligence (GenAI) is being vastly used by students and faculty for academics and research. It is important at this time to ensure that GenAI is embraced and used judiciously as it has taken the world by storm. UNESCO guidelines for utilizing the full potential of GenAI were made available to all however very few countries published their policies for use of GenAI. Pakistan national policy on AI were published at the beginning of the year and were mainly targeting development of local models of GenAI, creating hubs in all provinces, and building awareness in general public.

Four round table meetings were arranged in capital of three provinces (Karachi, Lahore, Peshawar), and federal capital Islamabad; as these cities have the highest number of medical and dental colleges. The consensus building exercise used Nominal Group technique (NGT) to ensure a scientific basis for guidelines document . The participants were sent two documents before the round table meetings, the UNESCOs document on policy guidelines and the Pakistan policy on use of AI. The participants in all these round tables included AI experts from faculties of engineering, business, social sciences, health professionals and senior faculty from medical and dental colleges mainly the ones that were users of AI or had major understanding of AI.

My talk will focus on areas of crucial importance for judicious use of GenAI and the scientific process that should be used for developing policies particularly when such technological advancements take the world by storm.

SYMPOSIUM 2B

Empowering Students through Experiential Learning: A Case Study of Advancing Planetary Health via Student-led Hackathon

Date: 5 October 2024
Time: 1720 - 1820
Venue: Mei Ling Young Auditorium 1, Level 4

Symposia Synopsis

In the dynamic landscape of health professional education, the interconnectedness of human, animal health, and planetary health has never been more apparent. The proposed Symposium shares unique experiential learning endevour undertaken by the University of Colombo's Faculty of Medicine (UCFM).

Embarking on a first-of-its-kind initiative, the UCFM organized Hackathons from 2022 onwards, dedicated to advancing concepts on Planetary Health and One Health. Spearheaded by a dedicated team of volunteer academics (Team Planetary Health UCFM), the flagship event titled 'Rescue Mission: Planet Earth' ignited a spark of innovation within the student community.

What sets our approach apart is empowering the students to take ownership of the initiative to become change agents. The organization of the hackathon was entirely delegated to students in the second year. This resulted in an outpouring of enthusiasm and innovative ideas, demonstrating the power of experiential learning in developing a deeper understanding of planetary health issues among the students.

In our Symposium, we explore the hackathon experience, revealing integrating planetary health concepts into real-world challenges identified by students. Through hands-on experiences, we cultivate critical thinking, teamwork, and a great sense of responsibility towards global health challenges. We also extend an invitation to explore the scalability and transferability of our model to other universities, encouraging educators to embrace experiential learning as a potent instrument in shaping the future of health professions education.

As a testament to the transformative impact of our initiative, a student representative will share firsthand accounts of how the program has influenced attitudes and behaviors, and the tangible steps towards implementation. Feedback from students further provides invaluable insights for future endeavors.

We envision a future where healthcare leaders are not just proficient in their fields but also equipped with the vision and passion to address the pressing health challenges of our time.

SYMPOSIUM 2B

Speaker 1:

Prof Tharanga Thoradeniya
Professor, Department of Biochemistry and Molecular Biology
Faculty of Medicine, University of Colombo, Sri Lanka
tharanga@bmb.cmb.ac.lk

Presentation Synopsis

Advancing Planetary Health through a Student-Led Planetary Health Hackathon

The dynamic process of executing a student-led hackathon aimed at introducing planetary health concepts to undergraduate students will be discussed. Initially organized by a group of academics, Team Planetary Health UCFM, the hackathon involved students from various disciplines across the university. Subsequently, recognizing the significance of student ownership and innovation, the organization was entirely handed over to UCFM medical and allied health students. Working in small groups of 5-6, these students collaborated under the guidance of faculty, industry, and other experts to brainstorm and develop solutions to real-world challenges.

The Hackathon was meticulously designed to inspire creative solutions and foster critical thinking among participants, emphasizing the interconnectedness of human health, animal health, and environmental sustainability. Central to its success was the integration of experiential learning methodologies, immersing students in practical scenarios and encouraging hands-on problem-solving to deepen their understanding of planetary health issues.

During the hackathon, teams of students drew upon their diverse backgrounds and expertise to come up with innovative solutions. Mentored by faculty members and guided by the principles of planetary health, students engaged in lively discussions and brainstorming sessions. Some projects even incorporated postgraduate students, enriching the collaborative environment and incorporating the basics of research into problem-solving.

Each team presented prototypes, solutions, and action plans, showcasing their passion, creativity, and commitment. This experience underscored the power of experiential learning in igniting a sense of purpose and responsibility toward global health challenges.

Through our presentation, we aim to demonstrate the transformative potential of student-led initiatives in reshaping health professions education. By empowering students to drive innovation and address complex issues such as planetary health, we not only enhance their learning experiences but also cultivate the next generation of compassionate and globally-minded healthcare professionals.

SYMPOSIUM 2B

Speaker 2:

Prof Piyusha Atapattu
Professor, Department of Physiology
Faculty of Medicine, University of Colombo, Sri Lanka
piyushaa@physiol.cmb.ac.lk

Presentation Synopsis

Elevating Experiential Learning through a Student-Led Planetary Health Hackathon

This presentation focuses on elucidating the educational principles underpinning the student-led hackathon designed to introduce planetary health concepts to undergraduate students. Through a comprehensive analysis of the experiential learning framework employed in this initiative, we aim to provide insights into enhancing educational outcomes and facilitating replication in other tertiary educational institutions.

At the core of our hackathon's educational principles lies the principle of experiential learning. By immersing students in real-world challenges and providing opportunities for hands-on problem-solving, we foster active engagement, critical thinking, and deeper understanding of planetary health issues. We explore into the pedagogical theories that inform this approach, including experiential learning cycles and theories of learning by doing, highlighting their relevance in the context of health professions education.

Furthermore, we examine strategies for improving the effectiveness of experiential learning in the hackathon setting and beyond by incorporating the concepts into the curricula. This includes fostering interdisciplinary collaboration, providing mentorship and guidance from faculty members, postgraduate students and other experts in the field and creating a supportive learning environment that encourages risk-taking and innovation.

In addition to discussing the educational principles guiding our hackathon, we offer practical insights into replicating similar initiatives in other educational settings. Drawing from our experiences and lessons learned, we provide a roadmap for educators seeking to integrate planetary health concepts into their curricula through experiential learning methodologies with considerations for sustainability and scalability.

Through our presentation, we seek to encourage educators to adopt experiential learning as a transformative method in health professions education. By sharing our best practices and replication suggestions, we aim to inspire the adoption of innovative pedagogical approaches. Our goal is to empower students to drive positive change in addressing global health challenges.

SYMPOSIUM 2B

Speaker 3:

Ms Ashvni Chandrakumar
Medical Student
Faculty of Medicine, University of Colombo, Sri Lanka
medmbbs202019@stu.cmb.ac.lk

Presentation Synopsis

Student perceptions on a Student-Led Planetary Health Hackathon

This presentation offers a firsthand exploration of the transformative journey experienced by students participating in a student-led hackathon focused on planetary health. Through reflective insights, we provide an overview of the challenges we encountered and the opportunities we embraced in this innovative learning endeavor.

As we immersed ourselves in the hackathon experience, we faced a myriad of challenges that tested our adaptability, resilience, and collaborative skills. From grappling with complex interdisciplinary concepts to navigating team dynamics and time constraints, we embarked on a steep learning curve that demanded problem-solving skills and effective communication. However, by overcoming these challenges we discovered our own strengths, established meaningful connections with our peers, and developed a deeper appreciation for the interconnectedness of planetary health issues.

Central to our experience was the opportunity to engage in experiential learning, through hands-on problem-solving and real-world application. We embraced the opportunity to apply our knowledge and skills to tackle pressing global health challenges, finding fulfillment in the tangible impact of our efforts. Moreover, the hackathon provided a platform for us to cultivate leadership skills, as we took ownership of our projects, navigated uncertainties, and motivated our teams towards shared goals.

Beyond the challenges, we also encountered numerous opportunities for growth and personal development. The hackathon fostered a sense of community and collaboration, where students came together to share perspectives, leverage each other's strengths, and co-create innovative solutions. Through mentorship from faculty members and other experts, we gained valuable insights and guidance, empowering us to think critically, and embrace a mindset of lifelong learning.

This presentation echoes the voices of students sharing our experiences, reflections, and lessons learned from participating in the hackathon and implementing our ideas thereafter. We highlight the transformative impact of experiential learning in shaping the next generation of compassionate and globally-minded healthcare professionals.

SYMPOSIUM 3A

One Health, Holistic Care: Integrating Lifestyle Medicine into Health Professions Education

Date: 5 October 2024
Time: 1820 - 1920
Venue: Mei Ling Young Auditorium 2, Level 4

Symposia Synopsis

The symposium aims to explore the intersection of One Health principles and Lifestyle Medicine within the realm of health professions education. One Health emphasizes the interconnectedness of human, animal, and environmental health, recognizing that the health of each is intrinsically linked to the others. Similarly, Lifestyle Medicine focuses on addressing the root causes of disease by promoting healthy behaviors and lifestyle modifications.

In this symposium, we will delve into the importance of incorporating Lifestyle Medicine principles into health professions education to equip future healthcare professionals with the knowledge and skills needed to provide holistic care. By integrating Lifestyle Medicine into medical, nursing, veterinary, and public health curricula, we can prepare students to address the multifaceted nature of health and disease.

Key topics to be covered include understanding the foundational principles of both One Health and Lifestyle Medicine, exploring evidence-based lifestyle interventions, and discussing strategies for interdisciplinary collaboration. We will also examine the role of technology in facilitating behavior change, emphasize the importance of patient-centered care, and address ethical considerations in promoting lifestyle interventions.

Through interactive discussions, presentations, and workshops, participants will gain insights into innovative approaches to curriculum development, teaching methodologies, and assessment strategies. We will explore case studies illustrating successful integration of Lifestyle Medicine principles into health professions education, as well as opportunities for future research and collaboration in this field.

Ultimately, this symposium aims to inspire educators, practitioners, and policymakers to embrace a holistic approach to healthcare education and practice. By integrating Lifestyle Medicine into health professions education, we can empower the next generation of healthcare professionals to promote health, prevent disease, and improve outcomes for individuals, communities, and the planet

SYMPOSIUM 3A

Speaker 1:

Prof Dr Rehmah Sarfraz
Director Department of Medical Education,
Islamabad Medical and Dental College
Pakistan.

Presentation Synopsis

The symposium titled **"Nurturing Healthcare Provider Well-Being: Promoting Resilience in the Medical Community"** is dedicated to addressing the critical issue of healthcare provider burnout and promoting strategies for fostering resilience within the medical community.

The symposium will begin by exploring the multifaceted challenges faced by healthcare professionals, including the demanding nature of their work, long hours, and exposure to high-stress environments. Attendees will gain insights into the prevalence and impact of burnout, compassion fatigue, and moral distress on the well-being of healthcare providers.

One of the key focuses of the symposium will be on strategies for promoting work-life balance and preventing burnout among healthcare providers. Through interactive discussions and presentations, participants will explore practical approaches to managing stress, setting boundaries, and prioritizing self-care. Topics will include time management techniques, stress reduction practices, and the importance of establishing a supportive work environment.

Furthermore, the symposium will highlight the role of lifestyle medicine principles in physician wellness programs. Attendees will learn about the integration of lifestyle medicine into healthcare provider wellness initiatives, including strategies for promoting healthy behaviors such as nutrition, exercise, sleep, and stress management. The symposium will emphasize the importance of a holistic approach to wellness, addressing not only physical health but also mental, emotional, and spiritual well-being.

SYMPOSIUM 3A

Speaker 2:

Prof Dr Tahira Sadiq
Professor of Public Health, Islamic International Medical College
Assistant Director of Riphah Institute of Lifestyle Medicine
Pakistan

Presentation Synopsis

The symposium titled **"Integrating Lifestyle Medicine into Medical Education"** focuses on strategies to infuse lifestyle medicine principles into medical curricula, fostering holistic patient care and preventive medicine.

Participants will explore effective methods for incorporating lifestyle medicine into the medical curriculum. This includes discussions on curriculum design, learning objectives development, and assessment strategies tailored to teach lifestyle medicine concepts and interventions. Emphasis will be placed on identifying key competencies and integrating lifestyle medicine into core medical courses and clerkship.

Interdisciplinary approaches to teaching lifestyle medicine will be highlighted, emphasizing collaboration among faculty from various disciplines such as medicine, nutrition, psychology, and public health. Through case studies and panel discussions, attendees will learn about the benefits of interdisciplinary collaboration in enhancing student learning and improving patient outcomes.

Moreover, leveraging technology and simulation in lifestyle medicine education will be explored. Participants will discover innovative tools and resources, such as virtual patient simulations and online platforms, to deliver engaging educational experiences. The symposium will underscore the potential of technology to enhance student engagement and provide real-world clinical experiences in lifestyle medicine.

Through workshops and interactive sessions, participants will gain practical skills to integrate lifestyle medicine effectively into medical education. The symposium provides a platform for educators and healthcare professionals to share best practices and explore new opportunities for advancing lifestyle medicine education.

Ultimately, the symposium aims to inspire attendees to embrace a holistic approach to medical education, preparing future healthcare providers to address the root causes of disease and promote health and well-being in their patients.

SYMPOSIUM 3A

Speaker 3:

Dr Maqsood ul Hassan
Vice Principal of Islamic International Medical College (IIMC)
Riphah International University
Pakistan.

Presentation Synopsis

The symposium titled **"Forward Focus: Future Perspectives of Lifestyle Medicine in Health Professions Education and Patient Care"** aims to delve into the evolving landscape of lifestyle medicine and its impact on healthcare education and patient outcomes.

Firstly, the symposium will delve into emerging trends and innovations in lifestyle medicine, analyzing their implications for health professions education and patient care. Attendees will explore cutting-edge research and technological advancements in lifestyle interventions, considering their potential to revolutionize healthcare delivery and improve health outcomes for patients.

Secondly, the symposium will emphasize interdisciplinary approaches to incorporating lifestyle medicine principles into health professions curricula. Participants will engage in discussions on collaborative models of education that integrate lifestyle medicine concepts across medical, veterinary, nursing, and public health programs. Through shared experiences and case studies, attendees will gain insights into the benefits of interdisciplinary collaboration in preparing future healthcare professionals to address the holistic needs of their patients.

Furthermore, the symposium will address the ethical considerations and challenges associated with integrating lifestyle medicine into patient care. Participants will examine issues of equity, access, and personal autonomy, considering how socio-economic factors and cultural differences may impact the delivery and uptake of lifestyle interventions. Through thoughtful discourse and interactive sessions, attendees will explore strategies for promoting equitable access to lifestyle medicine services and ensuring patient-centered care that respects individual values and preferences.

In conclusion, the symposium aims to inspire attendees to embrace the forward-thinking approach of lifestyle medicine in healthcare education and practice. By exploring emerging trends, fostering interdisciplinary collaboration, and addressing ethical considerations, participants will be equipped to navigate the evolving landscape of lifestyle medicine and drive positive change in patient care and population health.

SYMPOSIUM 3B

Educating (Health) Students and Practitioners to Empower Less Privileged Communities and Nations to Address One Health and Climate Change

Date: 5 October 2024
Time: 1820 - 1920
Venue: Mei Ling Young Auditorium 1, Level 4

Symposia Synopsis

Climate change is a wicked problem. The disadvantaged in developed economies and persons in developing countries (most of the global population) have contributed less to climate change but bear a disproportionate burden of its impact. Disadvantaged persons in developing nations, especially women and children are severely impacted. Colonialism, neocolonial structures, protectionism and wealth imbalances have hindered meaningful climate action. The unrestricted pursuit of profit may have irreversibly harmed our planet.

Healthcare professionals and students play a vital role in one health. They must address the health consequences of climate change and educate the public on this important issue. They have an important responsibility to lobby authorities and governments to create more planet-friendly policies.

Medicines and vaccines are important to maintain health and treat illness. Antimicrobial resistance and medicine access are major problems in the developing world and among the less privileged in developed nations. Millions of people globally still lack access to essential medicines. During the COVID-19 pandemic, global access to effective vaccines was extremely unequal with money being a cruel gatekeeper. In today's world a sick person can easily cross borders and reach any part of the globe within a day. Students and practitioners should be educated to advocate for and empower the disadvantaged.

Health humanities and systems thinking provide students with a different holistic perspective on planetary health and on the fragility of our planet. Learners will be better prepared for advocacy for climate and earth-friendly policies. Several decision makers are realizing the harmful effects of climate change on them and their families and this realization if strengthened can drive meaningful and sustained climate action. Learners should use implementation sciences to reduce the carbon footprint of healthcare, transition to renewable energies and implement changes to methods of transportation and food systems with particular reference to less privileged settings.

SYMPOSIUM 3B

Speaker 1:

Dr Anshu
MBBS, MD, DNB, MNAMS, MHPE
Director-Professor of Pathology,
Mahatma Gandhi Institute of Medical Sciences,
Sevagram, Maharashtra, India.
dr.anshu@gmail.com

Presentation Synopsis

Planetary health education: A perspective of the disadvantaged

The negative impacts of climate change affect several aspects of our lives. Human activity, animal behaviour, entire ecosystems, food production, temperatures, and availability of water are all being affected already. The interconnectedness of these issues is so worrisome. Solutions to wicked solutions like these require far-sighted collaborative solutions.

One of the contentious issues over global climate change is the divide between the interests and obligations of developed and developing economies. While the source of most of the emissions of greenhouse emissions have been developed countries, it is the developing countries who unfairly bear most of the brunt of this looming disaster. The question of equity is often overlooked. Many developing countries had to endure centuries of colonialism and impoverished native economies. They require energy resources to develop and attain a decent standard of living for their citizens.

Many developing countries have begun acting on reducing greenhouse emissions. These efforts are not often driven by climate policy, but by imperatives for energy security and alleviation of poverty. The opportunities for mitigating greenhouse emissions in developing nations are often hampered by competing demands for resources. They often do not have sufficient human capacity to analyze and identify future demands, as well as execute reforms. While people are good at responding once a calamity has happened, they are often unwilling to take the issue of preventing a potential disaster seriously.

There is increasing recognition that transformative methods are required in view of the interconnectedness of climate change, health, and sustainability. Health professionals and students need to be trained to address the consequences of climate change and educate and empower all stakeholders in this regard. Students and practitioners should recognize the problem early, and work as passionate advocates for change.

SYMPOSIUM 3B

Speaker 2:

Assoc Prof Pathiyil Ravi Shankar
MBBS, MD, FAcadMed, PSGFAIMER Fellow in HPE
IMU Centre for Education, IMU University, Kuala Lumpur, Malaysia.
pathiyilravi@imu.edu.my

Presentation Synopsis

Rational use of medicines, vaccines, one health and the less privileged

Rational use of medicine requires that patients receive medicines appropriate to their clinical needs, with correct information and at the lowest cost to them and their community. Access to essential medicines remains a problem in low- and middle-income countries and among under resourced communities in developed ones. Antimicrobials have been used irrationally driving antimicrobial resistance (AMR). Antimicrobials exert an artificial selective pressure on microbes and AMR can be slowed down with proper use of antimicrobials. Teaching students to use medicines rationally is important.

Many newer medicines are under patent protection and unaffordable to developing economies and the poor in developed ones. Patent protection has recently been strengthened. Ensuring access to newer medicines and vaccines globally is imperative to protect the planet. Newer medicines are aggressively promoted. Sales personnel are rewarded based on their ability to push the sales of expensive medicines. Newer, expensive medicines waste scarce resources especially in under-resourced settings. Healthcare students (HCS) should be educated about and be aware of pharmaceutical promotion. Medicines should be disposed of properly as they can have dangerous effects on the ecosystem and harm planetary health. HCS should educate the public about medicines.

Vaccines can play a vital role in building immunity to infectious diseases. The recent COVID-19 pandemic highlighted the issue of access to effective COVID19 vaccines. Many developing countries had less and late access to vaccines as their ability to pay was limited. Vaccine inequity had raised concern and the possibility of newer variants and their spread globally.

While many developed nations have mandated the teaching and assessment of prescribing skills this is still not the case in most developing countries who should address this on priority. Ensuring equitable access to medicines and their rational use can strengthen one health and help ensure the earth remains habitable for future generations.

SYMPOSIUM 3B

Speaker 3:

Dr Saroj Jayasinghe
Emeritus Professor of Medicine,
University of Colombo, Sri Lanka
saroj@clinmed.cmb.ac.lk

Presentation Synopsis

Empowering students (especially from disadvantaged settings) to feel, perceive and protect the health of our planet

Planetary health is an important concept that is closely linked to sustainability and global public health. Future health professionals need to be change agents who strive and succeed in envisioning, promoting, and creating a healthier planet and be empowered to act. At a more operational level, actions of health professionals will include reducing the carbon footprint of healthcare, the transitioning to renewable energies and changes to methods of transportation and food systems. This is echoed by several global organizations such as AMEE: "health professions education must equip undergraduates, and those already qualified, with the knowledge, skills, values, competence and confidence they need to sustainably promote the health, human rights and well-being of current and future generations, while protecting the health of the planet". Though increasingly considered a key component of health professional education, a recent review found inequities in resources for teaching / learning and a lack of a common planetary health module, especially in developing nations.

Institutions responsible for health professional education, especially those in the global south rise to the challenge and develop a core curriculum to ensure that future health professions will be passionate advocates for planetary health. Innovative educational methods (like transformative learning) are needed to create change agents who would create a healthier planet. Health professionals must be empowered with the core knowledge, communication skills, positive attitudes, and the ability to be advocates and leaders. They need to understand systems thinking, transdisciplinarity and have the skills to co-create knowledge on diverse topics related to planetary and one health such as biodiversity, mass extinctions and the impact of widespread environmental contamination. Their skills should extend to implementation sciences to include reducing the carbon footprint of healthcare, transitioning to renewable energies and changes to methods of transportation and food systems especially in under-resourced settings requiring greater attention.

SYMPOSIUM 3C

One Health: Are Cultural Differences in Professional Standards a Barrier to Progress?

Date: 5 October 2024
Time: 1820-1920
Venue: Online

Symposia Synopsis

Achieving One Health requires significant interprofessional and intercultural working practices. In this seminar we explore research findings regarding cultural differences in professionalism standards and expectations and critically consider the impacts these may have on progressing the One Health agenda. We then consider 2 applications of this to stakeholders. Firstly, how we may need to rethink medical curricula and professional development of students. Secondly, how we engage with patients and the public as partners.

This session will be based on the latest research evidence, but also include interactive case studies and practical suggestions to take away.

Speaker 1:

Prof Kate Owen
Director of Medical Studies Warwick Medical School, Warwick, UK
BSc MBChB MRCGP MMedEd SFHEA
katherine.owen@warwick.ac.uk

Presentation Synopsis

How different are professional standards across cultures and does this matter?

The presentations will showcase our own and the wider body of research about the similarities and differences in professionalism expectations across cultures. We will then consider the implications of this when applied to a One Health Approach. We will explore whether cultural differences in professionalism can be a barrier to a One Health Approach, or whether they may actually be to the benefit of all.

SYMPOSIUM 3C

Speaker 2:

Dr Kamran Sattar
MBBS, FAcadMEd-AoME (UK), MMedEd-UoD (UK), PhD (MedEd).
Dept. of Medical Education, College of Medicine,
King Saud University, Riyadh, Saudi Arabia
drkamransattar@gmail.com

Presentation Synopsis

Why is professionalism an important factor for achieving "One Health" objectives & how this relates to medical curricula?

Sustainable healthcare is now included in the UK's professional standards from the GMC. Kate will consider the evidence on how this is best introduced into the curriculum as a theme, but also how to ensure students develop as professionals committed to a One Health approach.

Speaker 3:

Dr Lindsay Muscroft
Associate clinical professor & Lead for Patient Engagement, Warwick Medical School
MBChB MRCGP MMedEd
L.muscroft.1@warwick.ac.uk

Presentation Synopsis

Professionalism and working with public stakeholders

The public are key stakeholders in effective One Health policy implementation through consultation, education and activism. We know that there are differences in how health care professionals interact with their patients and the wider public which may require differing engagement approaches. Drawing on her knowledge of patient involvement pedagogy Lindsay will explore if these differences are underpinned by professional values or by social constructs.

PRE-CONFERENCE WORKSHOP

WORKSHOP P1A (Onsite)

Date: 4 October 2024
Time: 0900 - 1200
Venue: 1.12.02, Level 1, IMU University, Bukit Jalil

Innovative Strategies to Enhance Student Engagement with One Health in Competency-Based Medical Education - Plans & Perspectives of Educators Vs Students

Facilitators:

Dr Krishna Mohan Surapaneni
Vice Principal and Professor,
Head of the Department of Medical Education & Bioethics Unit
Panimalar Medical College Hospital & Research Institute, Chennai, India.
krishnamohan.surapaneni@gmail.com

Dr. Surapaneni Krishna Mohan is a distinguished medical teacher, medical educator and scholar in the field of medical education and bioethics currently serving as the Vice Principal & Professor of Biochemistry; Head of the Department of Medical Education & Head of the Bioethics Unit at Panimalar Medical College Hospital & Research Institute (PMCHRI), Chennai, India. He is also serving as the Lead, AMEE - International Networking Center (AMEE-INC) at PMCHRI, Chennai. With his strong academic and educational endeavors and over two decades of experience as a medical teacher and researcher, he has made significant contributions to the realms of healthcare ethics and medical education / Health Professions Education (HPE) with over 250 scientific peer reviewed publications in various reputed national and international journals with high impact. Dr. Mohan holds fellowships in medical education from FAIMER, IAMSE & AoME and is a recipient of many awards at national and international level. Dr. Mohan's commitment to excellence in medical education, bioethics, and research, along with his extensive international engagements, make him an ideal and valuable contributor to the advances in medical and bioethics education

Miss Jyotsna Needamangalam Balaji
Medical Student
Panimalar Medical College Hospital & Research Institute, Chennai, India.
jyotsnabalaji774@gmail.com

Miss Jyotsna Needamangalam Balaji is a final-year medical student at Panimalar Medical College Hospital & Research Institute, Chennai, India. Demonstrating a robust commitment to medical research and education, she has successfully published 15 research papers, a remarkable feat that underscores her dedication and passion for medical education and research. Her background provides her with the necessary knowledge and skills to effectively communicate and educate others about the importance of a holistic approach to health, addressing the interconnections between human, animal, and environmental well-being. Her interest in conducting this workshop reflects her commitment to sustainability and her vision for a more integrated and comprehensive approach to medical education.

Dr Russel D'Souza
Head and Chair, Department of Education
International Chair in Bioethics
UNESCO Chair in Bioethics, Haifa
Melbourne, Australia
russell.f.dsouza@gmail.com

Dr Mary Mathew
Professor & Head of the Department of Pathology,
Kasturba Medical College, Manipal
Manipal Academy of Higher Education (MAHE), Manipal, India
marymathew883@gmail.com

Synopsis

The One Health concept represents a synergistic approach to understanding and managing the health of humans, animals, and the environment as interconnected entities. This holistic view is increasingly essential in medical education, addressing global challenges like zoonotic diseases, environmental degradation, and public health crises. However, the integration of One Health into medical curricula remains inconsistent, highlighting the need for comprehensive educational strategies that encompass this multidimensional perspective.

The envisioned workshop aims to bridge these gaps by facilitating an innovative and interactive learning environment. It will specifically address the need for developing engaging, interactive, and case-based learning activities that mirror complex real-world health issues from a One Health perspective. This includes incorporating game-based learning methodologies, which can enhance student engagement and retention of complex concepts through simulation and role-play scenarios reflecting real-life interdisciplinary decision-making.

Moreover, the workshop will explore the integration of electives and community-based learning opportunities, allowing students to engage directly with One Health issues within their communities. This hands-on approach encourages the application of classroom knowledge to real-world situations, fostering a deeper understanding of the interconnectedness of human, animal, and environmental health.

The event will also prioritize the creation of interdisciplinary opportunities, enabling medical students to collaborate with peers from veterinary, environmental science, and public health disciplines. This cross-sectoral engagement is crucial for understanding the multifaceted nature of One Health challenges and the collaborative effort required to address them.

Additionally, the workshop will focus on establishing effective assessment tools to measure students' competencies in One Health principles. These tools will ensure that learners not only acquire theoretical knowledge but also develop the practical skills necessary to apply One Health approaches in their future careers.

Learning Outcomes

At the end of the workshop participants will be able to:

- Gain a comprehensive understanding of One Health concepts, highlighting their importance in addressing global health challenges and the interconnection between human, animal, and environmental health.
- Develop and implement interactive, case-based learning activities reflecting real-world health issues, fostering interdisciplinary problem-solving and decision-making skills.
- Explore and integrate game-based learning strategies to enhance student engagement and understanding of complex health concepts through simulation and interactive scenarios.
- Create and implement elective courses focused on specific One Health topics, providing depth and hands-on experience in areas of interest.
- Establish community-based learning opportunities for students to apply One Health principles in real-world settings, engage with local communities, and address social determinants of health.
- Foster interdisciplinary collaboration skills, teaching participants to work effectively across various sectors and disciplines to solve health challenges.

PRE-CONFERENCE WORKSHOP

WORKSHOP P1B (Onsite)

Date: 4 October 2024
Time: 0900 - 1200
Venue: 1.12.03, Level 1, IMU University, Bukit Jalil

Moving from Policy to Practice to Tackle Microaggressions

Facilitators:

Prof Joanne Selway
BSc (hons), PhD, SFHEA, PG Cert MedEd
Phase 1 Lead and Professor in Medical Education
Faculty of Medicine and Allied Health
The University of Buckingham, Buckingham MK18 1EG
Direct Line: +44 (0)1280 827556

Professor Joanne Selway is the Phase 1 Lead at the University of Buckingham Medical School and is a Professor in Medical Education. Professor Selway has been part of the Medical School since its establishment, throughout the GMC-accreditation process, and has extensive educational experience across the programme but specifically in admissions and selection, assessment, and student choice within the MB ChB curriculum. Professor Selway was appointed to Phase 1 Lead in 2020.

As a medical education researcher Professor Selway participates in pedagogic research in Medical Education, developing scholarly work and research publications in the areas of teaching, learning and assessment, leadership and selection.

Prof Jacqueline O'Dowd
Strategic Development and Quality Lead
Faculty of Medicine and Health Sciences
The University of Buckingham, Buckingham MK18 1EG
Direct Line: +44 (0)1280 827535

Professor Jacqueline O'Dowd is the Strategic Development and Quality Lead for the Faculty of Medicine and Health Sciences at the University of Buckingham. Professor O'Dowd is an advocate of building a strong student voice in education and governance. Professor O'Dowd has been part of the Medical School since its establishment, throughout the GMC-accreditation process, and has extensive educational experience across the programme. Professor O'Dowd's Medical Education research interest include community engagement and social accountability, transnational education, curriculum development and leadership in education.

Synopsis

The creation of an inclusive work environment that is safe and supportive for all, is key to achieving a diverse workforce. While equality legislation and local polices set out a commitment to address inequalities and remove discrimination, these policies often fail to address the behaviours that lead to covert bias in a workplace. This is often due to effects of the hidden curriculum and competing discourses present in medicine.

It is important to differentiate between microaggressions and incidences of overt discrimination. Microaggressions are every day, subtle, intentional, or unintentional interactions or behaviours that

communicate hostile, derogatory, or negative messages toward a marginalised individual or group. Many people are trying to be complimentary when delivering microaggressions, highlighting the need for an enhanced understanding and culture change in the workplace.

The first step in addressing microaggressions is to provide individuals with the skills to recognize when a microaggression has occurred and address these behaviours. In many cases, this will involve education and an enhanced awareness of unconscious biases. In this workshop, participants will discuss types of microaggression and share good practice of how to address the underlying culture of tolerance of microaggressions. The workshop will additionally draw on learning from empirical data gathered from students at two UK medical schools and explore the coping mechanisms they are using to deal with microaggressions.

Much of the learning comes from the participants themselves, through thought-provoking activities and cross-table conversations. including their own questions, experiences, or challenges. Participants will brainstorm practical strategies and actions to raise awareness of microaggressions, making it harder for covert discrimination to exist surreptitiously within a working or learning environment.

Learning Outcomes

At the end of the workshop participants will be able to:

- Understand what we mean by the term microaggression and differentiate from incidences of overt discrimination (e.g., sexism, racism, classism and homophobia)
- Recognise when it is appropriate to raise and escalate concerns through informal communication with colleagues and through formal clinical governance and monitoring systems about undermining.
- Understand how effective interpersonal relationships can build an inclusive environment
- Develop an understanding of messages delivered by different discourses in medicine
- Recognise the potential impact of participants own attitudes, values, beliefs, perceptions and personal biases (which may be unconscious) on individuals and groups
- Develop a commitment to equality, diversity, and inclusion
- Identify microaggressions and differentiate from overt discrimination

PRE-CONFERENCE WORKSHOP

WORKSHOP P1C (Onsite)

Date: 4 October 2024
Time: 0900 - 1200
Venue: 1.12.06, Level 1, IMU University, Bukit Jalil

Global Health Professionals in 2030: Building Your Center of Excellence

Facilitators:

Dr Avinash Pathengay
Network Director of Education at L V Prasad Eye Institute, Visakhapatnam, Andhra Pradesh, India.
avinash@lvpei.org.

The LVPEI 'Just A Minute (JAM) clinical pearls' (emailer - digital learning) in Ophthalmology and Optometry that have received a phenomenal response globally from the eye care fraternity are his brainchild. He has conceptualized many other innovative learning tools, and the LVPEI education training programs and collaborations have been further strengthened with a strong digital component under his leadership. He has played an integral role in establishing the retina services at the institute's GMR Varalakshmi Campus in Visakhapatnam.

After graduating from Stanley Medical College, Dr Pathengay did his ophthalmology residency at Madras Medical College. Following this he did a fellowship at Sankara Nethralaya in vitreoretinal surgery. Later, he also pursued a one-year fellowship with Dr Harry Flynn at Bascom Palmer Eye Institute, Miami, Florida.

Dr Pathengay is a co-founder of RETNETINDIA, a group with over 950 retinal surgeons in India. He has to his credit more than 100 presentations in international and national conferences and 147 peer-reviewed publications and has authored 9 chapters in various textbooks. He was honored as the Outstanding International Scholar by the Bascom Palmer Eye Institute, USA, and was ranked as an expert (second position) in endophthalmitis by the Expertscape Daily Experts. He was appointed as a member of the Professional Development and Education Committee, Association for Research in Vision and Ophthalmology (ARVO). He has also received several awards for his presentations at forums such as the American Academy of Ophthalmology (AAO), Asia Pacific Ophthalmological Society (APOS), and World Ophthalmology Congress (WOC).

Ms Snigdha
Network Associate Director of Education at L V Prasad Eye Institute, Hyderabad, Telangana, India.
snigdha@lvpei.org

Snigdha's career path reflects a unique blend of clinical expertise and a passion for education. Her journey began in 2006 with a Bachelor of Science in Optometry from the Bausch and Lomb School of Optometry, equipping her with a strong foundation in eye care. Driven by an interest in the strategic side of healthcare, Snigdha pursued a master's in business administration from IBS Gurgaon (2008-2010). This strategic acumen has proven invaluable in her current role.

Snigdha's true calling lies in the education sector. She currently serves as the Network Associate Director for the Standard Chartered - LVPEI Academy for Eye Care Education. In this leadership

position, she plays a pivotal role in shaping the future of eye care professionals. Her responsibilities are comprehensive, encompassing:

- Strategic Leadership: spearheading the development and execution of global training programs, ensuring they remain at the forefront of the ever-evolving eye care landscape. This includes integrating cutting-edge digital education and research initiatives.
- Capacity Building: She fosters a culture of continuous learning and professional development, empowering future generations of eye care professionals.
- Collaboration Architect: cultivates and leverages national and international partnerships, fostering knowledge exchange and best practices across borders.
- Advocacy Champion: She is a vocal advocate for the importance of eye care education, raising awareness and promoting access to quality vision care globally.
- Brand Architect: plays a key role in developing and strengthening the brand reputation of the Standard Chartered - LVPEI Academy for Eye Care Education.

Snigdha's dedication to education, coupled with her strategic vision and leadership skills, positions her as a key figure in advancing the field of eye care education on a global scale.

Assoc Prof Dr Chen Zhi Xiong
Associate Professor, Assistant Dean (Education)
NUS Medicine, Singapore.
zhixiong_chen@nus.edu.sg

Zhi Xiong obtained his PhD from the NUS Graduate School of Integrative Sciences and Engineering. He completed his fellowship with Ludwig Cancer Research at Karolinska Institutet and obtained his Master of Health Professions Education from Maastricht University. Currently, he is Assistant Dean (Education) of NUS Medicine and an Associate of the Centre for Medical Education (CenMED). Deeply interested in international professional development, he is Chairperson of the Asia-Pacific Biomedical Science Educators Association (APBSEA) and a Board Member of the International Association of Medical Science Educators (IAMSE). In pediatric cancer research, Zhi Xiong is seeking new therapies and new ways of treating and monitoring disease as Principal Investigator of the Neurodevelopment and Cancer Laboratory at NUS Centre for Cancer Research (N2CR). He is also an Affiliate Member of the National University Cancer Institute, Singapore (NCIS) and a Joint Scientist at KK Women's and Children's Hospital (KKH). Involved in the education of medical, dental and life sciences students, Zhi Xiong is exploring ways to broaden health professions education and promote transdisciplinary learning with specific interests in the role of medical sciences in health professions practice, faculty development, and medical education technology. As Master of NUS LightHouse and ex-NUS Assistant Dean of Students, Zhi Xiong firmly believes that education goes hand in hand with holistic student development and champions innovative ways to foster academic and non-academic learning.

Synopsis

This dynamic pre-conference workshop equips you with the tools and strategies to navigate the rapidly changing landscape of global health education. The focus is on identifying the global metrics (adjusted to the local needs), tracking them, applying simplified concepts for developing effective capacity development strategies and advocacy. This requires Glocalization - consultation, buy-in, and careful assembly of experts with knowledge of the metrics and local healthcare landscape. This can be strong enabler in evolution of an academic center as center of excellence and develop the global health professional.

Learning Outcomes

At the end of the workshop participants will be able to:

- Master the "4 Ts": Learn a simplified framework (Talent, Technology, Treasure, Tenderness) to develop effective capacity building programs.
- Track what matters: Discover key metrics to measure and monitor the progress of your initiatives.
- Become a strategic leader: Develop a clear roadmap for your institution to become a center of excellence in global health education.

PRE-CONFERENCE WORKSHOP

WORKSHOP P1D (Onsite)

Date: 4 October 2024
Time: 0900 - 1200
Venue: 1.12.08, Level 1, IMU University, Bukit Jalil

Do We Need OSCE to Show Competency of Novice to Mastery?

Facilitators:

Assoc.Prof Dr Kavitha Nagandla
Associate Dean, Academic Affairs, School of Medicine,
Consultant O&G,
IMU University, Malaysia

Dr Nagandla is an International fellowship in Medial education (FAIMER). She also holds a few leadership academic positions sucha as Programme Director and also Assessment Lead in the School of Medicine.

She has a special interest in Gynae-oncology and Undergraduate Medical Education specifically in quality of assessment. She conducted a few consultancy workshops on OSCE Best Practices at the National level. She is also the elected Member International Representative Committee (IRC) RCOG, Malaysia since September 2021.

In the past, she served as Postgraduate Examiner for MRCOG Part 3 Examinations and has become the International faculty for MRCOG PART 2/3, RCOGNZ, Delhi, India (2017-2019).

She is a Certified Colposcopist from Indian Society of Colposcopy and Cervical Pathology (ISCCP) and also hold the Fellowship in Colposcopy from KK Hospital Singapore. Overall, she has 46 publications in national and international journal.

Prof Dr. Sharifah Sulaiha Syed Aznal
Professor in Obstetrics and Gynaecology &
Dean School of Medicine, IMU University, Malaysia
Consultant Obstetrics and Gynaecology, IMU Clinic and Hospital Tuanku Jaafar, Seremban

Prof Sulaiha graduated with MBChB from University of Glasgow in 1995 and worked in NHS Hospitals Scotland before returning to Malaysia to serve in the Ministry of Health (MOH) for 10 years. She completed specialty training in Obstetrics and Gynaecology in UKM in 2002 and later joins IMU in 2005.

Her main interests in academia focus on areas of clinical & experiential learning, workplace-based assessment, curriculum design and simulation learning. She was the Medical Program Director in 2010 and Associate Dean of Teaching Learning, IMU in 2014. She became the Associate Dean of Academic Affairs and later Clinical Affairs for the School of Medicine (SOM) in 2018. During this time, she has written several university policies & practice guidelines, developed the clinical education training as part of IMU faculty development as well as reviewed and redesigned the medical curriculum in 2019 which later launched in 2021. She now serves as the Dean of School of Medicine, IMU since Jan 2023.

She represented the university in the Med-net group of Malaysian Medical Educators and Asia Pacific Medical Education networking group (APME-net). She has organized and become invited speakers

at various national and international conferences in areas of Medical Education and Obstetrics & Gynaecology.

Her main clinical interests are in Urogynaecology and Female Adolescent Sexual Health. She has more than 30 publications in ISI indexed journals and contributed to many chapters in more than 5 books of related fields and medical education. She is a reviewer for various journals i.e BMC Pregnancy and Birth, BJOG, MMJ etc.

She was an exco member for Malaysian Association of Education in Medicine & Health Science (MAEMHS), an Obstetrics & Gynaecology Society Malaysia (OGSM) State Representative, the International Continence society, a resource person for the Chiputra University, Surabaya, Indonesia and spoke person representing Malaysia at the International Association of Medical Science Educators (IAMSE) in 2020. She was appointed as a subcommittee member of the Malaysian houseman training for Malaysian Medical Council (MMC) and the taskforce for National Action Plan on Patient Safety for the MOH, Malaysia. And is now appointed as a Malaysian Medical Council member for 2023/26.

She has performed several self-accreditation exercises for IMU programs since 2017. She has also been invited and attended the trainings by MMC to be panel member of accreditation for undergraduate and postgraduate or specialty programs in Malaysia.

She is passionate with humanitarian work and is an ambassador for 'Yayasan Ikhlas'. She actively involves in public health talks and activities mainly dealing with adolescent health and women's wellness by I-Medik, Little Khalifah Group and Al - Ansar Group.

Dr Malanashita Ganeson
Department of Family Medicine
Programme Director, MBBS
School of Medicine, IMU University, Malaysia

Dr Malanashita Ganeson is a Senior Lecturer in the Department of Family Medicine and Programme Director for the MBBS program at IMU University. In addition to her academic roles, Dr Malanashita is the IMU Family Medicine Specialist at Klinik Kesihatan Nilai. She obtained her MBBS in 2005 from the International Medical University and was made a Fellow of the Royal Australian College of General Practitioners 2015.

Dr Malanashita has an interest in medical education and has more than a decade of teaching experience starting as a part-time academic staff in 2014 before assuming the role of a full-time lecturer in 2019, both at IMU Department of Family Medicine. She has previously served as the Assessment Coordinator at IMU. Dr Malanashita Ganeson was awarded the Gold Medal at the 2022 IMU Learning Resources Festival and the Best Presentation Award at the 14th International Medical Education Conference in 2021. She has also received the esteemed Past President Dr. Frank Tan's Best Student Award from the Academy of Family Physicians Malaysia in 2014.

Dr Brinnell Annette Caszo
Department of Human Biology,
School of Medicine, IMU University, Malaysia

Brinnell Caszo is a medical doctor, with a masters in physiology, having trained at St Johns Medical College and Hospital, Bangalore. She has more than 20 years of experience having served at both the undergraduate and postgraduate level. Apart from contributing to teaching and learning across several programs, her work is in the field of assessment in preclinical years. Her research interests are related to metabolism and human performance.

Datin Dr Clarence Kavetha
Department of Paediatrics,
School of Medicine, IMU University, Malaysia

Datin Dr. Clarence Kavetha is a dedicated paediatrician and esteemed educator, recognized for her significant contributions in both clinical practice and academia. With over a decade of experience in paediatric medicine, Dr Kavetha has demonstrated unwavering commitment to the health and well-being of children.

Dr. Kavetha embarked on her journey in paediatric care after completing her medical degree, driven by a passion to make a positive impact on the lives of young patients and their families. Her early years in practice were marked by a relentless pursuit of excellence, as she honed her skills in diagnosing and treating a wide range of paediatric conditions.

In 2021, Dr. Kavetha expanded her role beyond clinical practice and embraced the realm of academia as a Lecturer at the International Medical University (IMU). Drawing upon her rich clinical experiences, she embarked on a mission to nurture the next generation of healthcare professionals, instilling in them not only the necessary knowledge but also the compassion and empathy essential for effective patient care.

Synopsis

The Objective Structured Clinical Examination (OSCE) is undoubtedly a robust method to assess competency across various healthcare disciplines. This workshop essentially aims to provide participants with a deep understanding of how OSCEs can be structured to assess competency levels ranging from novice to mastery. Through interactive sessions and case studies, attendees will gain insights into designing, implementing, and evaluating OSCEs effectively.

Key Topics Covered:

- OSCE relevance in healthcare education, its benefits and challenges
- Competency Frameworks in Understanding competency domains and levels
- Mapping OSCE stations to competency frameworks
- Ensuring comprehensive coverage of competencies across the blueprint
- Crafting scenarios tailored to novice, intermediate, and mastery levels
- Sharing insights and lessons learned from real-world experiences

- Monitoring progress and fostering continuous improvement
- Case Studies and Best Practices

Learning Outcomes

At the end of the workshop participants will be able to:

- Define and differentiate between novice, intermediate, and mastery levels of competency in healthcare.
- Construct of OSCE blueprints that reflect the progression of competencies from novice to mastery.
- Evaluate the significance of quality assurance in ensuring fairness, validity, reliability, and defensibility of assessment outcomes.

PRE-CONFERENCE WORKSHOP

WORKSHOP P1E (Onsite)

Date: 4 October 2024
Time: 0900 - 1200
Venue: 1.12.09, Level 1, IMU University, Bukit Jalil

How to Use Generative AI to Transform Health Professions Education for the Advancement of One Health.

Facilitators:

Dr Weeming LAU
Jeffrey Cheah School of Medicine and Health Sciences, Monash University Malaysia, Selangor, Malaysia.
lau.wee.ming@monash.edu

Weeming is a trained clinician in Internal and Respiratory Medicine. She is currently the lead coordinator in Early Years Clinical Skills (Teaching, Learning, and Assessment) at the Jeffrey Cheah School of Medicine and Health Sciences Monash University Malaysia, in addition to being the Deputy Head of the Medical Education Unit. She also facilitates Ethics teaching in the undergraduate medical program.

Weeming is very passionate about medical education and regularly seeks approaches that drive effective teaching and learning. She frequently adopts concepts from the business arena such as Gemba, Kaizen, kanban, lean management, root cause analysis (fish bone diagram), and many others to enliven her teaching sessions.

Weeming has presented education-related research work and facilitated workshops/symposiums at international medical education conferences such as Asia Pacific Medical Education Conference (APMEC); International Medical Education Conference (IMEC), OTTAWA; Association of Medical Educators Europe (AMEE); International Conference in Clinical Skills (Italy); and the Asia Pacific Bioethics Network (APBEN) Conference. Her research areas of interest are in feedback, clinical skills and ethics (teaching, learning and assessment), student partnerships, and artificial intelligence that makes boring teaching and learning sessions fun.

Dr Andrew TAGG
Western Health, Melbourne, Australia.
andrewjtagg@gmail.com

Andrew Tagg graduated from medical school in London in 1997. While training to be a specialist in emergency medicine, he became disillusioned with working in the NHS and sought escape from the fog-bound shores of Great Britain as a doctor in the cruise ship industry.

Channeling his inner Dr Bricker, he sailed the world looking after passengers and crew alike. There he learned the power of performance in enhancing communication. Dressed to the nines in a white jacket and bow tie, he hosted tables, and dealt with medical emergencies, all in front of a crowd of passengers, armed with cameras, capturing his every move.

Realising that life at sea was not a permanent career option, he emigrated to Melbourne, Australia, to continue his training in adult and paediatric emergency medicine. The true definition of a portfolio career has seen him working as an anaesthetist, an emergency physician and a retrieval specialist,

flying around Victoria to transport the critically ill. Now a fully qualified emergency physician, he cares for the residents of Melbourne's western suburbs.

A keen advocate for doctors' wellbeing, he has spoken at length about the challenges of looking after oneself as a doctor. In his spare time, he runs the popular paediatric website Don't Forget The Bubbles, which aims to improve doctors' ability to care for the children in front of them.

He describes his areas of research as eclectic, knowing that he will never top the moment it was cited by Jimmy Fallon and James Corden on late-night television.

Synopsis

In this dynamic three-hour workshop, we invite health professionals from diverse backgrounds to embark on a transformative journey into the realm of Generative Artificial Intelligence (GAI) and its profound implications for healthcare education.

Educators must embrace innovative approaches that transcend traditional boundaries as we stand at the convergence of burgeoning data generation, futuristic educational paradigms, challenging stakeholder engagement, and environmental sustainability.

Throughout the workshop, participants will be immersed in hands-on activities designed to illuminate the transformative power of GAI in reshaping healthcare education. We will explore how GAI tools can transcend the limitations of conventional lecture-based learning, paving the way for dynamic, flexible, and time-effective educational experiences. From the seamless integration of on-site activities into virtual platforms to the redefinition of competency-based assessment, participants will gain practical insights into harnessing the full potential of GAI in education.

Ethical considerations will also take centre stage as we navigate the complex terrain of data privacy, bias mitigation, and algorithmic transparency inherent in using GAI tools. We aim to address ethical concerns and foster responsible practices in GAI-driven healthcare education by fostering collaborative discussions and interdisciplinary partnerships.

Ultimately, this workshop seeks to empower educators with the knowledge, skills, and ethical framework necessary to leverage GAI tools effectively in healthcare education. Through collaborative exploration and hands-on experimentation, participants will emerge equipped to drive positive change and innovation in the field, ensuring that healthcare education remains at the forefront of technological advancement.

Learning Outcomes

At the end of the workshop participants will be able to:

- Define the principles of One Health
- Integrate interdisciplinary knowledge and skills in a specific context.
- Explore the application through the use of GAI, including awareness of ethical implications
- Learn to write relevant prompts
- Extend the concepts learnt to collaborative dialogue with colleagues from multidisciplinary sectors.

PRE-CONFERENCE WORKSHOP

WORKSHOP P2A (Onsite)

Date: 4 October 2024
Time: 1400 - 1700
Venue: 1.12.02, Level 1,
IMU University, Bukit Jalil

Developing Interdisciplinary Programs in Integrative Health

Facilitators:

Dr Ivan Cherh Chiet Low
Department of Physiology and Human Potential Translation Research Program, Yong Loo Lin School of Medicine, National University of Singapore, Singapore
ivan.low@nus.edu.sg

Ivan is a Senior Lecturer and the Director for Continuous Education Training (CET) in the Department of Physiology, National University of Singapore (NUS). He is also the Deputy Director of Medical Education in the department. He teaches medical and life sciences students and leads curriculum design for adult learning CET courses on topics related to exercise physiology and health. He is a strong proponent of contextualized and experiential learning and has received multiple Faculty Teaching Excellence Awards as well as NUS Honour roll in Teaching Excellence. In addition to his teaching commitments, Ivan runs a Human Performance and Applied Physiology laboratory in NUS and his main research interests lie in the area of thermoregulation and fluid balance to enhance human performance and cognition. He has a provisional patent filed for an ear-based core temperature monitoring system and has multiple publications in the field of thermal physiology and brain functions.

Dr Amanda Huee-Ping Wong
Department of Physiology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore
Phswhpa@nus.edu.sg

Dr Amanda Wong is an Instructor in the Department of Physiology at the Yong Loo Lin School of Medicine, National University of Singapore (NUS). Progressing from her post-doctoral research on lung diseases to academia, she is currently involved in medical, allied health professions, and life sciences education. She also serves as a course coordinator for both undergraduate and graduate modules, particularly in integrative health and teaching in higher education. She has multiple scientific and educational publications, for which she has presented her work at regional and international conferences. Her current education research explores the different aspects of curriculum development, focusing on effective implementation and innovative educational practices.

Dr Long Yun Chau
Department of Biochemistry, Yong Loo Lin School of Medicine, National University of Singapore, Singapore
bchlongy@nus.edu.sg

Dr Long Yun Chau earned his PhD from the Karolinska Institute. He completed his postdoctoral training at the Howard Hughes Medical Institute, Children's Hospital Boston, Harvard Medical School. Prior to joining NUS Medicine, he served as a research scientist at Lilly Research Laboratories in Indiana, USA. Currently, he holds the position of Senior Lecturer and Deputy Head (Lifelong

Learning) at the Department of Biochemistry, NUS Medicine. Dr Long actively contributes to curriculum design, assessment strategies, and the development of teaching and learning activities tailored for students in the medical, dental, and life science fields. Additionally, he oversees course coordination and shapes educational experiences tailored to these student populations.

Assoc Prof Zhi Xiong Chen
Department of Physiology and NUS Centre for Cancer Research (N2CR), Yong Loo Lin School of Medicine, National University of Singapore, Singapore
zhixiong_chen@nus.edu.sg

Zhi Xiong obtained his PhD from the NUS Graduate School of Integrative Sciences and Engineering. He completed his fellowship with Ludwig Cancer Research at Karolinska Institutet and obtained his Master of Health Professions Education from Maastricht University. Currently, he is Assistant Dean (Education) of NUS Medicine and a Centre for Medical Education (CenMED) Associate. Deeply interested in international professional development, he is Chairperson of the Asia-Pacific Biomedical Science Educators Association (APBSEA) and a Board Member of the International Association of Medical Science Educators (IAMSE). In pediatric cancer research, Zhi Xiong is seeking new therapies and new ways of monitoring disease as Principal Investigator of the Neurodevelopment and Cancer Laboratory at NUS Centre for Cancer Research (N2CR). He is also an Affiliate Member of the National University Cancer Institute, Singapore (NCIS) and a Joint Scientist at KK Women's and Children's Hospital (KKH). Involved in the education of medical, dental, pharmacy and life sciences students, Zhi Xiong is exploring ways to broaden health professions education and promote transdisciplinary learning with specific interests in the role of medical sciences in health professions practice, faculty development, and medical education technology. As Master of NUS LightHouse and ex-NUS Assistant Dean of Students, Zhi Xiong firmly believes that education goes hand in hand with holistic student development and champions innovative ways to foster academic and non-academic learning.

Synopsis

In today's rapidly evolving healthcare landscape, marked by global challenges and technological advancements, there is a pressing need for educational programs that foster interdisciplinary understanding and collaboration. The National University of Singapore's Yong Loo Lin School of Medicine has responded to this need with the pioneering Minor in Integrative Health (MIH), designed to cultivate future health leaders capable of bridging diverse disciplines to enhance health outcomes. This workshop invites educational leaders, educators of diverse professions, program designers, and healthcare professionals to delve into the processes and pedagogical strategies of this innovative minor program built on the foundation of integrating various disciplines to address complex health issues holistically.

The workshop will begin by exploring the developmental journey of MIH, offering insights into the rationale, challenges, and frameworks that guided curriculum design of this interdisciplinary programme. Participants will gain insight into the program's structure, starting with the introductory

course 'What Impacts Health?', where students engage in immersive simulations and case studies to understand health determinants comprehensively. This sets the stage for advanced courses where students apply interdisciplinary methods to real-world health challenges, as demonstrated in courses like "Improving Health: Beyond Medicine", "Barriers to Health", "The Landscape of Health: Evolving Spaces and Technology", and the "Capstone Project in Integrative Health".

A key component of the workshop will be interactive sessions focusing on the pedagogical strategies employed in MIH, including the use of curriculum integration models and the SOLO taxonomy to enhance interdisciplinary learning outcomes. These discussions will be enriched by case studies from MIH courses, highlighting successful interdisciplinary collaboration and innovative problem-solving approaches. Additionally, the workshop will cover the unique assessment methods developed to evaluate student progress in an interdisciplinary learning environment.

Through carefully curated hands-on activities, participants will have the opportunity to engage in designing case studies and assessments that foster interdisciplinary collaboration to address common health issues. This will involve tackling industry-posed problems to foster a practical understanding of how interdisciplinary approaches can be effectively implemented in ideating health solutions and program development. In addition, participants will also be involved in guided activities designed to mirror the course and program design processes, with particular focus in the integration of various disciplinary content that meets their intended educational outcomes.

This workshop invites participants to reflect on their own disciplines and understanding of health, and provides them with the skills and knowledge to design or refine their interdisciplinary programs. By the end of this workshop, participants will not only have a comprehensive understanding of the MIH's journey from conceptualization to implementation but will also gain insights to the development of similar programs at their institutions. Through shared experiences and collaborative learning, participants will be able to advance health outcomes through interdisciplinary education as they prepare a new generation of professionals adept at navigating and improving the complex landscape of health and healthcare.

Learning Outcomes

At the end of the workshop participants will be able to:

- Discuss the strategies and methodologies used in designing an interdisciplinary curriculum, with a specific focus on integrating various disciplines to address comprehensive health issues.
- Conceptualize and outline effective interdisciplinary health education courses or programs tailored to their own institution's contexts and needs

PRE-CONFERENCE WORKSHOP

WORKSHOP P2B (Onsite)

Date: 4 October 2024
Time: 1400 - 1700
Venue: 1.12.09, Level 1,
IMU University, Bukit Jalil

Leveraging AI Tools and Technologies for Digital Health Education

Facilitators:

Dr Gunasekar Thangarasu
Senior Lecturer, Centre for Digital Health and Health Informatics,
School of Business and Technology, IMU University, Malaysia

He obtained his Ph.D. in Information Technology from the University Technology PETRONAS, Malaysia, following his Master of Computer Applications from Bharathidasan University, India. With over 20 years of experience, he excels in teaching, learning, and research, demonstrating a strong commitment to fostering a dynamic learning environment and conducting impactful research in Information Technology. His dedication has been recognized through three Best Lecturer Awards, a Chief Executive Award, and the Global Educational Excellent Award (Gurukul's Bharat Gaurav, India) from during his tenure as an academician. He has attended as a Chief Guest and Keynote speakers for several international conferences. He is a life member of Institute of Research Engineers and Doctors, International Association of Engineers, and Professional Commitment of Research Advancement professional bodies.

He has obtained more than 10 professional certifications including Artificial Intelligence, Data Analytics, Cloud Computing, Cybersecurity, Microsoft Azure, Microsoft Office Specialist, PMI Project Management and Certified Ethereum & Solidity Practitioners. He actively conducts training and workshop in these areas.

Dr. Gunasekar boasts a proven track record in publication including a book, ten book chapters, three design patterns, 30 research journals, and presented over 60 research papers at international conferences. He actively contributes as a reviewer for renowned journals.

Additionally, Dr. Gunasekar has been appointed as Adjunct Faculty in the Department of Applied Machine Learning at Saveetha Institute of Medical and Technical Sciences in India

AP Dr Fabian Davamani Amalraj
Department of Applied Biomedical Science and Biotechnology,
IMU University

Dr. Fabian Davamani is an accomplished Associate Professor within the Division of Applied Biomedical Science and Biotechnology at the International Medical University in Kuala Lumpur. With a background deeply rooted in microbiology, his academic journey includes a Ph.D. in Microbiology and post-doctoral fellowships at esteemed institutions such as National Cheng Kung University and National Tsing Hua University in Taiwan, supported by the National Science Council fellowship.

His research interests span across multiple domains, including microbiology, molecular biology, antimicrobial formulations, bioinformatics, and the innovative application of virtual reality in various fields. Dr. Davamani is an active member of the American Society of Microbiology (ASM), further demonstrating his commitment to advancing the field.

His contributions have been recognized both nationally and internationally, with notable achievements including being the runner-up at the National Innovation Awards (MYRANTI) in Malaysia and receiving Silver Medals for his work in microbiology skills training using virtual reality desktop applications and 3D virtual interactive laboratories at the Teaching Innovation Festival (TLIF). Additionally, he has been honored with the Dr. Balakrishnan Memorial Award for best research in Ophthalmology and has received prestigious fellowship awards from organizations such as the Lady Tata Memorial Trust and the Council of Scientific and Industrial Research.

Dr. Fabian's dedication to research is evidenced by his extensive publication record, comprising 45 papers in national and international journals, covering a wide array of topics including antimicrobial agents, cancer, and molecular mechanisms. Through his endeavors, he continues to push the boundaries of scientific understanding and pave the way for innovative solutions in biomedicine.

Dr Tan Ee Xion
Department of Digital Health and Health Informatics,
IMU University

Dr Tan is an academic with a background in computer science and a specialisation in data science, digital health, health informatics and analytics at the Department of Digital Health & Health Informatics at IMU University, School of Business & Technology. She has been in academia for 19 years and conducted numerous training/workshops in computer programming, as well as health informatics and analytics for adult learners. She is a member of the Association of Computing Machinery (ACM) and a researcher working closely with faculty and students at IMU for health data analytics, AI and Information Systems.

Dr Tan is also the Head of Department for the Department of Digital Health & Health Informatics, and a Senior Lecturer. She received her Bachelor of Computer Science (2001) and Master of IT (Minor Thesis) (2005), and PhD (2016), all from Monash University.

She also supervised students and examining thesis from a few universities that major in Computer Science and Health Informatics and Analytics. All of them are working on data analytics topics.

Synopsis

This comprehensive session offers a profound exploration of the intersection between healthcare education and artificial intelligence (AI). Initially, it provides an overview of One Health Education, emphasizing the holistic approach to healthcare involving interdisciplinary collaboration. Following this, participants are introduced to AI and its diverse applications within the healthcare domain. The session delves into how AI-driven solutions effectively tackle prevailing challenges in healthcare education.

Key concepts in AI are elucidated, laying a foundation for understanding its transformative potential. Through an interactive segment, attendees engage with various AI-driven tools and technologies. This includes personalized learning platforms tailored to individual student needs, virtual patient simulations enhancing practical skills, intelligent tutoring systems facilitating personalized instruction,

and data analytics offering profound educational insights. These demonstrations not only showcase the versatility of AI in education but also underscore its capability to revolutionize learning experiences in healthcare settings. Overall, the session illuminates the evolving landscape where AI augments traditional approaches, fostering innovation and excellence in healthcare education.

Learning Outcomes

At the end of the workshop participants will be able to:

- Describe the fundamental concepts of AI and its relevance in digital health education.
- Apply diverse AI-powered tools and technologies tailored for health education
- purposes.
- Discuss case studies and real-world examples showcasing the successful integration of AI in health education.
- Apply personalized learning and knowledge assessment in teaching and learning
- Discuss ethical implications, challenges, and future directions of AI in health education

PRE-CONFERENCE WORKSHOP

WORKSHOP P2D (Onsite)

Date: 4 October 2024
Time: 1400 - 1700
Venue: 1.12.08, Level 1, IMU University, Bukit Jalil

'It's Not My Fault'- Attribution Theory in Healthcare Professionalism Assessment.

Facilitators:

Dr Dominic Johnson
BDS (Hons) MBBS MSc PhD FDSRCS MRCPsych CertMedEd SFHEA
Vice Dean- Clinical,
Honorary Consultant Forensic Psychiatrist, Forensic CAMHS Service, Tees, Esk and Wear Valleys NHS Foundation Trust,
School of Medicine, Institute of Life Course & Medical Sciences,
Faculty of Health & Life Sciences, University of Liverpool
Cedar House, Ashton Street, Liverpool, L69 3GE, United Kingdom

Dr Dominic started his career in dentistry graduating from Newcastle University with BDS (Hons.) in 1996 and then FDSRCS(Ed) in 1999. He graduated in medicine at Newcastle with Distinction in 2002.

He did his higher training in Forensic Psychiatry at the Maudsley Hospital. He worked as Consultant Forensic Psychiatrist in London until he was appointed as a Clinical Senior Lecturer for NUMED Malaysia in June 2011. he was then appointed as Dean of Clinical Affairs there in October 2012.

He returned to the UK in August 2014 and was a Clinical Sub Dean, the MBBS Course Lead for professionalism and led Fitness to Practise on behalf of Newcastle University.

He was awarded a PhD in July 2022 for my thesis looking at the experience of medical students resitting Final year. In July 2022 he took the role as Vice Dean- Clinical at the School of Medicine at Liverpool University.

Synopsis

The workshop highlights attribution theory and how it can be applied to operationalising assessment of healthcare professionalism assessment.

The session draws on a literature review that was performed as part of my doctoral thesis that examined attribution theory in the context of high stakes academic failure as well as my experience in medical professionalism and Fitness to Practice.

Attribution theory refers to the systemic errors humans make when attributing the reasons behind their or other people's behaviour and sits within the field of social psychology. Four key aspects will be explored in the workshop.

Weiner's model's three categories:
- Stability (stable and unstable)
- Locus of control (internal and external)
- Controllability (controllable or uncontrollable)

These provides a framework to consider attributions.

Further biases that are considered are correspondence bias, self-serving bias and self–handicapping bias.

The session will be an interactive workshop using short didactic presentation of core aspects of attribution theory which will then support tabletop discussions and utilise case examples to work through and highlight strategies on how to manage such issues.

Learning Outcomes

At the end of the workshop participants will be able to:

- Consider the nuance in how mental health may affect assessment of academic/clinical knowledge and skills and professionalism
- Provide context about the reality of dealing with the above
- Highlight tensions between supporting students with their mental health and the demands of providing assessment in a professionally accredited programme and support participants to develop ideas and strategies in finding that balance

PRE-CONFERENCE WORKSHOP

WORKSHOP P2E (Onsite)

Date: 4 October 2024
Time: 1400 - 1700
Venue: 1.12.03, Level 1, IMU University, Bukit Jalil

Interprofessional Team Building in One Health Landscape Through Gamification

Facilitators:

Dr Rabia Aftab
Aga Khan University, Karachi, Sindh, Pakistan.
rabia.aftab@aku.edu

A dedicated medical educationist with a passion for enhancing the capacity of healthcare professionals, she holds a Master's degree from a prestigious public university in Pakistan. With over five years of extensive experience in medical education, she has consistently excelled, achieving distinctions and securing top positions throughout her undergraduate program.

Her diverse interests span across various domains, including online teaching, capacity building, gamification, and residents' assessment. Currently serving as a medical educationist at Aga Khan University, she brings a wealth of knowledge and expertise to her role, contributing significantly to the advancement of medical education within the institution. Complimentary registration*

Dr Aliya Ahmed
Aga Khan University, Karachi, Sindh, Pakistan
aliya.ahmed@aku.edu

Dr Aliya Ahmed is a Professor of Anaesthesiology at Aga Khan University (AKU) and Director of Education Cell. Her areas for research interest include general anaesthesiology, acute pain management and health professions education, with special interest in assessment in postgraduate education

Dr Shaur Sarfaraz
Altamash Institute of Dental Medicine, Karachi, Sindh, Pakistan
dit.drshaur@gmail.com

Dr. Shaur Sarfaraz is an accomplished professional with extensive experience in medical and dental education.Currently serving as the Director/Assistant Professor at the Department of Medical Education and Section Editor for the AJDM at Altamash Institute of Dental Medicine, she has made significant contributions to the field by playing a key role in faculty development, designed online courses and curriculum design.

Dr Aun Ali
Fazaia Ruth Pfau Medical College, Karachi, Sindh, Pakistan
aunalikhowaja@gmail.com

Dr Aun Ali is a general and laparoscopic surgeon, working in department of surgery FRPMC, Karachi. His area of expertise is basic laparoscopic surgery and advanced abdominal open surgical procedures including colorectal malignancies, as well as a background in medical education. He is involved in

teaching for more than 10 years in medical schools. He has experienced both conventional and innovative active teaching and learning strategies so far. He had an opportunity to integrate clinical curriculum of surgery into a modular system at MBBS level. I have designed a GET, SET & GO programme for fresh medical graduates. In 2022, he participated in a Team work project by Harvard Medical School on "Integration of Quality Improvement Education" , and received an award for best performance. He realize that with change of time and technology, the dynamics of education has changed markedly. Therefore as a learner, he need to pace with the change and update our modes of teaching/education. He has modified his teaching strategies according to innovative methodologies.

His future goal as an educator is to train students and residents according to standard guidelines and develop a uniform surgery curriculum at national level to meet the needs of community. He is also inclined to explore the Global Surgery in Pakistan in near future. Overall, he believe that learning new things keeps him alive and help him evolve and grow. Once the process of learning is stopped, the growth halts.

Synopsis

One Health has emerged as a crucial framework that emphasizes the connections between human, animal, and environmental health. Interprofessional collaboration, involving professionals from various healthcare sectors working together to address common goals, plays a pivotal role in advancing the principles of One Health. However, building effective interprofessional teams can be a difficult task due to differences in training, communication styles, and organizational cultures. To overcome these obstacles and promote collaboration within the One Health context, innovative approaches are needed. Gamification, the application of game design elements, offers a promising solution. By leveraging the inherent motivation, engagement, and learning inherent in games, gamification can facilitate interprofessional team building in the One Health landscape. Through interactive and immersive gaming experiences, healthcare professionals can develop essential skills such as communication, problem-solving, and decision-making while gaining a deeper understanding of the concepts related to team building.

Learning Outcomes

At the end of the workshop participants will be able to:

- Discuss interprofessional team building in one health
- Design plan for incorporating effective team building strategies in the given scenario.
- Apply the concepts of collaboration and team formation dynamics in One Health using gamification

PRE-CONFERENCE WORKSHOP

WORKSHOP O1A (Online)

Date: 4 October 2024
Time: O900 - 1200
Venue: Online (Zoom)

"Transcending Boundaries: Integrating One Health for Holistic Patient Wellness - Enhancing Clinical Skills"

Facilitators:

Dr Sara Shakil
MBBS, MHPE
Senior Instructor
Department for Medicine and Educational Development
Aga Khan University (AKU), Karachi, Pakistan
Email: sara.shakil@aku.edu

Sara Shakil is currently working as a Senior Instructor, at Department of Medicine and Educational Development, Aga Khan University Karachi (AKU), since January 2019. She is also the MHPE Program Thesis Coordinator, and coordinate between students, supervisors and examiners for the completion of MHPE Thesis As educational lead in Department of Medicine, She is responsible for contribution in the development, evaluation, and renewal of undergraduate and postgraduate medicine curriculum, pre and post exam analysis, training of simulated patients, review of MCQs, EMQs and OSCEs. She effectively contribute in respective departmental faculty meetings and facilitate review and conduct of all academic activities for undergraduate and postgraduate medical education within the department.Her roles also include liaison and coordination with program directors of residency programs, supervise all undergraduate examination (clinical and written exams) and initiate educational research in respective clinical departments.

She has played a pivotal role in overhauling and modifying the Year 4 undergraduate assessment for the Medicine clerkship. She has worked very closely with her colleagues from Section of Infectious Diseases in reviewing their existing curriculum and facilitated development of table of specifications (TOS) along with evidence-based assessment strategies for their clerkship and residency program. In her capacity as an Educational Coordinator in Medicine, she introduced innovation and improved teaching practices by integrating Cyber Patient, a virtual learning tool, into Medicine clerkships. Cyber Patient allows students to interact with simulated patients, refining their skills in history-taking, physical examinations, diagnosis, treatment, and follow-up. It provides a secure and flexible environment for medical students to engage in repeated practice, including the opportunity to learn from failures.

She conduct various Faculty Development Workshops on Learning in the Clinical Setting using multiple clinical teaching models, Case-Based Integrated Learning, Constructing One-best MCQs, Developing High-Quality Extended-matching Questions, and Enhancing Emotional Intelligence.

Dr Iffat Khanum
MBBS FCPS(MEDICINE) , FCPS(Adult Infectious Disease), MHPE, FACP, FRCP
Assistant Professor and consultant infectious diseases
Section of infectious diseases, Department of Medicine
Aga Khan University (AKU), Karachi, Pakistan
Email: iffat.khanum@aku.edu

Dr Iffat works as Assistant Professor, in Section of Infectious Diseases (ID), Department of Medicine at AKUH. She actively involved in both undergraduate as well as postgraduate medical education. I have served as year 4 MBBS infectious Diseases rotation coordinators for 6 years, have reformed year 4 ID rotation curriculum and now appointed as co-chair, year 4 MBBS committee at AKUH in Jan 2024. She is also Director of Adult infectious diseases fellowship program at AKUH since 2020. She has supervised many residents and fellows and being IM fellowship supervisor at College of physician and surgeon of Pakistan have supervised training and research project of many postgraduate trainees at AKUH . She recently completed Master in Health Professional education in December 2023 form AKUH

and have conducted numerous educational activities both within and outside AKUH like CME, workshops and seminars as director as well as facilitators. Being a clinician as well as clinicians educator, As both a clinician and a clinician educator, my passion for teaching future physicians drives her to continuously engage in new teaching endeavors. Whether it's through innovative instructional methods, incorporating cutting-edge technologies, or developing novel curricula, I am committed to nurturing the next generation of healthcare professionals. By staying abreast of advancements in medical education and tailoring my approach to meet the evolving needs of learners, she strive to instill not only knowledge but also critical thinking skills, compassion, and a commitment to lifelong learning. Guiding aspiring physicians on their journey is not just a profession but a calling that I wholeheartedly embrace.

Dr Kiren Habib
M.B,B.S., MCPS Medicine, FCPS Medicine, Fellowship in Adult Infectious Diseases
Senior Instructor and Consultant Physician, Section of Infectious Diseases, Department of Medicine,
Aga Khan University (AKU), Karachi, Pakistan
Email: kiren.habib@aku.edu

Dr Kiren is currently working as a consultant physician in the Section of Infectious Diseases, Department of Medicine, Aga Khan University. Her work here besides the clinical responsibilities, involves teaching. She has been teaching both undergraduate medical students and post graduate trainees including interns, residents and fellows. This includes didactic sessions as well as bedside teaching and clinical skills sessions. She has been the clinical coordinator of the Year-5 medicine rotation since 10 years, which besides teaching also involves education administration such as scheduling sessions, setting exam papers, pre and post hoc analysis of exam results, simulated patient training, orientation and feedback sessions for students and review of student evaluations and exam

coordination and was appointed as the Co-chair of the Year-5 sub-curriculum committee of the medical college. In this role, she has served on several medical college committees like the committee for mapping content to curriculum and have helped develop the COVID module for medical students, which was subsequently awarded the collaborative teaching award, and the Year-5 clinical skills course on simulators.

As a clinician, she understands the importance of acquiring good clinical and communication skills. She enjoys teaching and try to impart skills of critical thinking, clinical examination, history taking and communication to the trainees at her institute which are essential for a competent physician.

As an infectious disease physician, she recognize the importance of infection prevention and antibiotic stewardship in providing a standard of care for our patients. She has conducted several infection control training workshops at our institute and other public and private sector hospitals. She was the master trainer for infection control training for healthcare workers as part of the 'We care' program in collaboration with Federal Government during the COVID pandemic. She has conducted CME sessions and workshops on various infectious diseases and public health related issues for healthcare workers and the public.

She has also attended several workshops/courses on medical education such a "Providing effective feedback", "Development of Exam blueprint, EMQ's", Short course in health professions education etc. to enhance my teaching skills.

Synopsis

One Health (OH) is an approach that recognizes that the health of people is closely connected to the health of animals and our shared environment. Factors like population growth, animal contact, environmental changes, and global travel contribute to the spread of zoonotic diseases. As stated by the One Health Commission, "One Health is a collaborative, multi-sectorial, and trans-disciplinary approach working at local, regional, national, and global levels to achieve optimal health and well-being outcomes by recognizing the interconnections between people, animals, plants, and their shared environment. With the rise of zoonotic diseases, environmental degradation, and emerging infectious threats, there is an increasing recognition that health outcomes are influenced by factors beyond traditional medical realms. Over the past three decades, it has become evident that most new zoonotic diseases originate in animals, notably wildlife, due to human activities altering ecosystems, agriculture, urbanization, and international travel. Numerous significant outbreaks of infectious diseases with zoonotic origins, such as SARS, Ebola, CCHF and the pandemic of COVID-19, have profoundly impacted global health. Understanding their emergence is critical for effective disease prevention and control strategies for public health. Furthermore, lessons from recent pandemics have demonstrated the importance of education and training in One Health approaches for both educating the public and healthcare professionals about zoonotic disease prevention and for enhancing epidemic and pandemic preparation. The medical school curriculum often lags behind in incorporating comprehensive One Health education. Therefore, as future healthcare professionals, undergraduate and postgraduate medical students must grasp the principles of One Health and integrate them into their practice.

The aim of the workshop is to equip participants with the knowledge and skills necessary to take comprehensive histories and conduct examinations that consider not only the patient's medical background but also the broader context of their interactions with animals and the environment. Through interactive discussions and role plays, participants will gain practical insights into incorporating One Health principles into their clinical approach. This workshop will enable participants to approach patients with a broader perspective, recognizing the interconnectedness of health across species and ecosystems.

Learning Outcomes

At the end of the workshop participants will be able to:

- Appreciate the concept of One Health and its significance in addressing global health challenges.
- Develop skills in history-taking and examination techniques through evidence-based bedside clinical teaching methods, encompassing human, animal, and environmental health factors
- Demonstrate clinical skills from a One Health perspective through role-playing exercises.

PRE-CONFERENCE WORKSHOP

WORKSHOP O1B (Online)

Date: 4 October 2024
Time: O900 - 1200
Venue: Online (Zoom)

"Rigor Rises: A Medical Education Research Odyssey"

Facilitators:

Dr Syeda Hanaa Fatima
Assistant Professor
Health Professions Education, National University Of Medical Sciences, Rawalpindi, Pakistan
Mbbs, Mmed (University Of Dundee, Scotland)
Phd Scholar-Health Professions Education (University Of Malaya, Malaysia

Dr. Syeda Hanaa Fatima, a graduate of Foundation University Medical College, began her career at Shifa College of Medicine as a Demonstrator in 2012. Concurrently, she pursued her interest in medical education by enrolling in the Masters in Medical Education program at the University of Dundee in Scotland. Later, she transitioned to the Department of Health Professions Education at Shifa College of Medicine, contributing significantly to various aspects of Medical Education, including Curriculum development, Assessment strategies, Program Evaluation, Teaching & Learning methodologies, and Faculty Development.

In addition to her roles at Shifa College of Medicine, Dr. Hanna Fatima has expanded her academic pursuits by undertaking a Ph.D. in Health Professions Education at the University of Malaysia. Her academic work focuses also on Program Evaluation, reflecting her niche in this area. Her diverse interests include Self-Directed Learning (SDL), Simulations, Faculty Development, Entrustable Professional Activities (EPAs), and Digital Learning.

Beyond her institutional roles, Dr. Hanaa has served as Assistant Director HPE/ME at the National University of Medical Sciences (NUMS) and Shifa International Hospital. In these positions, she played a pivotal role in designing and implementing various programs, including CHPE and MHPE.

Dr. Hanaa's dedication to advancing Medical Education is further demonstrated by her active participation in numerous research projects across various disciplines. She has presented multiple projects at both national and international conferences, showcasing her commitment to shaping the future of medical education.

Dr Naushaba Sadiq
Associate Professor- Health Professions Education, National University Of Medical Sciences, Rawalpindi, Pakistan
Mbbs, Mcps (Radiology) , Mhpe (Aga Khan University)

Dr. Naushaba Sadiq is a graduate of Rawalpindi Medical University. She served in Diagnostic Radiology for 11 years which include her work at Foundation University Medical college. During her stay at Foundation University she was assigned additional responsibilities in the Department of Medical Education (DME)in addition to her duties in Radiology. Experience in DME generated her interest in this emerging field and she joined Advanced level diploma in HPE and then Masters Program offered by Aga khan university Karachi. She served ten years in DME in the same institution.

She established exam cell, clinical skills lab, supervised curricular reforms& innovation and introduced quality assurance measures in examination as Head of DME. She is currently working as Associate Professor of Health Professions education at NUMS.

Dr Sajida Naseem
Associate Professor in Community Medicine, Shifa College of Medicine
Shifa Tameer e Millat University in Islamabad, Pakistan

Dr Sajida is an esteemed Associate Professor in Community Medicine at Shifa College of Medicine, nestled within the esteemed Shifa Tameer e Millat University in Islamabad, Pakistan. Dr. Naseem brings a rich academic background, holding an MBBS, MPH, MRCGP(INT), MCPS, and pursuing her MS and PhD in CHPE. Her dedication to fostering research skills among students and professionals alike is unparalleled. Dr. Naseem's passion extends beyond the classroom, as she serves as a revered trainer at the College of Physicians and Surgeons, shaping the future of healthcare education with her expertise and commitment.

Synopsis

In recent years, the field of medical education has witnessed significant advancements driven by ongoing research efforts aimed at improving teaching methodologies, assessment practices, and curriculum design. As educators strive to meet the evolving needs of learners and adapt to changes in healthcare delivery, there is a growing recognition of the pivotal role that research plays in shaping educational practices and outcomes.

Research in medical education serves as a catalyst for innovation, providing valuable insights into effective teaching strategies, learner engagement techniques, and competency-based assessment approaches. By conducting high-quality research studies, educators and researchers can identify best practices, address gaps in knowledge, and explore new frontiers in medical pedagogy.

Research outputs that are characterized by their rigor, relevance, and practical applicability have the potential to foster transformative changes in medical education. They empower educators to implement evidence-based interventions, refine curriculum structures, and optimize learning environments to better meet the needs of diverse learners and prepare future healthcare professionals for the challenges of modern practice.

Learning Outcomes

At the end of the workshop participants will be able to:

- Produce research outputs of higher quality and relevance, fostering positive changes in medical educational practices

PRE-CONFERENCE WORKSHOP

WORKSHOP O2A (Online)

Date: 4 October 2024
Time: 1400 - 1700
Venue: Online (Zoom)

Effective Communication in Multicultural Health Care Environment; Empowering the One Health System

Facilitators:

Dr Magda Ahmed Wagdy Youssef
Senior Pediatric Consultant, Sidra Medicine.
Assistant Professor, Clinical Pediatrics,Weill Cornell Medicine-Qatar (WCM-Q),
Qatar.

Dr Magda is a Senior Pediatric Consultant at Sidra Medicine. She is an Assistant Professor of Clinical Pediatrics at Weill Cornell Medicine-Qatar (WCM-Q).

Dr Magda received her medical training at Cairo University, Egypt and worked as a General Pediatrician at Hamad Medical Corporation (HMC) since 2006. Dr. Magda's areas of practice include inpatient medicine, patient safety and detection of adverse events. She was appointed to chair the Pediatrics Quality and Patient Safety Committee. Dr. Magda has strong interests in Medical Education and supervises residents in clinical setting. She is an instructor and in-charge of different workshops on communications, APLS, quality, and professionalism.

Dr Manasik Hassan
Clinical Lecturer, General Pediatrics, College of Medicine, Qatar University
Asisstant Professor Clinical Pediatric, Weill Cornell Medicine-Qatar (WCM-Q)
Qatar

Dr Manasik is a General Pediatric Consultant at Hamad General Hospital (HGH), Hamad Medical Corporation (HMC) since 2015. She is also a Clinical Lecturer in General Pediatrics, College of Medicine, at Qatar University and an Assistant Professor of Clinical Pediatric at Weill Cornell Medicine-Qatar (WCM-Q).

Dr Manasik received her medical training at Gezira University, Sudan. Her areas of practice and interest include inpatient medicine, participating in designing and conducting clinical research, teaching, and supervising residents during their residency, putting great effort in clinical and academic researchers and quality improvement projects in pediatric programs. She has a wide variety of accepted abstracts and has presented workshops in multiple international conferences. She is an instructor of a different educational committee including communication, simulation, quality and safety.

Synopsis

Promote communication and collaboration among Health Care Providers (HCPs) in a busy clinical environment is paramount. Effective communication associated with better patient care, less medical errors, increase teamwork & job satisfaction.

such collaboration is challenging and often requiring unplanned communication among busy healthcare providers. Differences in training, communication styles and multi-cultural background of nurses and physicians contributes to communication problems.

Learning Outcomes

At the end of the workshop participants will be able to:

- Highlights the importance of effective multicultural healthcare communication & collaboration among (HCPs) working in one system
- Identify challenges and barriers to promoting communication in multicultural clinical work area
- Use different practical communication tools and strategies to promote such collaboration

PRE-CONFERENCE WORKSHOP

WORKSHOP O2B (Online)

Date: 4 October 2024
Time: 1400 - 1700
Venue: Online (Zoom)

Designing the Future of One Health Education: An Interdisciplinary Challenge

Facilitators:

Assoc Prof Melvyn Quan
Faculty of Veterinary Science, University of Pretoria, Pretoria, South Africa.
melvyn.quan@up.ac.za

Melvyn Quan, an alumnus of the University of Pretoria where he pursued veterinary science, embarked on a distinguished journey in the field post-graduation. Initially, he practiced at a small animal veterinary clinic in Kent, UK, for a year and a half. His quest for deeper knowledge led him to pursue a Master of Science, investigating copper deficiency in blesbok within the Camdeboo National Park. His academic path progressed with a PhD studentship at the Pirbright Laboratory in the UK, in affiliation with the University of Edinburgh, where he focused on modeling the in vivo dynamics of the foot-and-mouth disease virus in pigs.

In 2005, Quan returned to Onderstepoort as a research officer, dedicating his efforts to the development of rapid diagnostic assays and exploring the molecular epidemiology of the African horse sickness virus. By 2010, his expertise and dedication had elevated him to the position of a senior lecturer in the Department of Veterinary Tropical Diseases (DVTD).

Quan's research interests have since evolved, focusing not only on the rapid diagnostics of veterinary significant viruses but also on the phylogeography of viruses through the use of bioinformatics, phylogenetics, and geographic information systems tools. His commitment to advancing veterinary science is paralleled by a profound interest in One Health, recognizing the intrinsic connection between human, animal, and environmental health. This holistic perspective drives his research and teaching, underscoring the importance of interdisciplinary collaboration in tackling health challenges.

Furthermore, Quan is deeply engaged in health professions education, advocating for an integrated approach that prepares future professionals to address global health issues through a One Health lens. His work in this area highlights the significance of equipping students with the knowledge and skills to navigate the complexities of health care in a dynamically interconnected world, ensuring they are ready to contribute effectively to global health initiatives.

Dr Heleen Roos
Department of Family Medicine, University of the Witwatersrand, Johannesburg, South Africa.
heleen.roos@wits.ac.za

Dr. Heleen Roos is a Public Health Medicine Specialist. With over 20 years of clinical experience both in South Africa and internationally, Dr. Roos has dedicated the past decade to focusing on Occupational Health, Public Health Medicine, and Health Professions Education. Dr. Roos has previously managed the Public Health academic program for undergraduate medical students and is actively involved in the development of the new MBChB curriculum at the University of Pretoria.Dr.

Roos's research interests encompass One Health and Health Professions Education, underscoring the importance of interdisciplinary approaches in addressing complex health issues. In collaboration with the faculty of veterinary science and health sciences, she was part of the team to developed a transdisciplinary One Health module. This module, tailored for undergraduate veterinary and medical students, highlights the interplay between human, animal, and environmental health, fostering a holistic understanding of health.

Dr Sean Patrick
School of Health Systems and Public Health, University of Pretoria Institute for Sustainable Malaria Control; Environmental Chemical Pollution and Health research Unit, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa.
sean.patrick@up.ac.za

As a lecturer in the Disease Control track at the School of Health Systems and Public Health, University of Pretoria, and a scientist in the Environmental Chemical Pollution and Health (ECPH) Research Unit, Sean Patrick plays a pivotal role in bridging the gap between environmental health and public health. HIs affiliation with the University of Pretoria Institute for Sustainable Malaria Control (UP ISMC) as a member of the management committee further underscores their commitment to combating health challenges through innovative and interdisciplinary approaches. Since 2007, his research has been deeply rooted in the study of endocrine disruption, culminating in a PhD in Environmental Health focused on the reproductive effects of endocrine-disrupting chemicals on rats.

Sean's postdoctoral work managed two significant South African-Canadian studies, delving into the molecular foundations of the intergenerational transmission of paternal environments and the generational and sex-specific effects of paternal environmental exposures. This research area, Environmental and Social Impacts on Infectious and Chronic Diseases, underscores a commitment to integrating the One Health concept, which recognizes the interconnection between people, animals, plants, and their shared environment.

By aiming to weave sustainable development goals into public health research, Sean advocates for a trans-disciplinary approach to tackle the intricate environmental-social challenges influencing disease emergence and progression. His work aligns particularly with SDG 3, focusing on reducing deaths from malaria and other neglected tropical diseases, and minimizing illnesses from harmful chemicals. Additionally, he leverages SDG 4, promoting education as a catalyst for healthy lifestyles and reduced exposure to harmful substances through community interventions. Furthermore, the focus extends to SDG 6, aiming to improve water quality and mitigate water pollutants, emphasizing the critical nexus of environmental health and public well-being.

Sean Patrick's holistic approach to health research not only contributes to advancing the One Health initiative but also highlights the importance of collaborative efforts in addressing global health challenges, firmly positioning him as a key figure in the intersection of environmental, animal, and public health disciplines.

Prof Sumaiya Adam
Departement of Obstetrics and Gynaecology, School of Medicine, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa.
sumaiya.adam@up.ac.za

Sumaiya Adam is a distinguished figure in the field of Obstetrics and Gynaecology, with a specialized focus on Maternal Fetal Medicine. Serving as a clinician, her expertise extends beyond patient care to the realm of medical education, where she has made significant contributions at the University of Pretoria. Professor Adam played a pivotal role in the MBChB curriculum review, spearheading the development of the innovative One Health interdisciplinary module. This module, under her leadership, marks a milestone in integrating diverse health disciplines, emphasizing the interconnectedness of human, animal, and environmental health.

Her vision for medical education is rooted in addressing the unique challenges faced by resource-limited settings. Professor Adam is passionate about devising creative and effective solutions to enhance educational outcomes. She is committed to preparing students for the complexities of the global health landscape, focusing on equipping them with the skills and knowledge necessary to navigate the multifaceted challenges they will encounter in their professional lives.

Professor Adam's interest in creative solutions to medical education challenges is not just theoretical but is applied in her work. She advocates for innovative teaching methods that can adapt to the constraints of resource-limited environments while maintaining high standards of education. Her efforts are aimed at ensuring that medical students are not only well-versed in their fields but are also capable of critical thinking, problem-solving, and applying their knowledge in diverse settings.

Through her work, Professor Sumaiya Adam has become a key figure in the transformation of medical education. Her contributions are not only limited to her specialty in Maternal Fetal Medicine but extend to shaping future healthcare professionals who are well-prepared to address the health challenges of the world with a holistic and interdisciplinary approach.

Synopsis

Over the last three years, a committed team at the University of Pretoria in South Africa has tirelessly worked to create a harmonious balance between human, animal, and environmental health within an interdisciplinary One Health module. This trailblazing initiative, crafted for undergraduate medical and veterinary science students, showcases the team's dedication to highlighting the intricate interdependence of various health domains. Their effort underlines a steadfast commitment to equipping students to navigate the multifaceted health challenges of the modern world with a balanced and holistic perspective. In this workshop, the team would like to share their experiences with you.

Developing an interdisciplinary "One Health" module for undergraduate students in medical and veterinary sciences presents a compelling challenge, especially in the context of large classes. The concept of One Health, emphasizing the interconnection between human, animal, and environmental

health, necessitates a holistic educational approach. However, creating an engaging, collaborative learning environment that caters to students with diverse backgrounds and varying levels of prior knowledge requires innovative strategies. This workshop aims to address these challenges, focusing on determining effective learning outcomes, leveraging technology for collaborative learning, and integrating interactive teaching methods.

This workshop is aimed at faculty interested in developing an interdisciplinary One Health module for large student groups.

Learning Outcomes

In this workshop:

- Participants will engage in a hands-on challenge to design an innovative, interdisciplinary "One Health" module for undergraduate medical and veterinary science students. The workshop focuses on formulating learning outcomes, navigating the complexities of interdisciplinary education, and creating engaging teaching, learning, and assessment methods.

ORAL PRESENTATION ABSTRACTS

Curriculum Design

ABSTRACT ID:
ORF-CUD02

Implementing Lifestyle Medicine in Undergraduate Medical Education at Riphah International University, Pakistan

Tahira Sadiq[1], Maqsood Ul Hassan[1], Shagufta Feroz[1]
[1]*Riphah International University, Pakistan*

Background:
Worldwide scientific evidence associates unhealthy lifestyle practices with morbidity and mortality related to non-communicable chronic diseases. Globally, there is insufficient lifestyle medicine training of physicians at undergraduate and postgraduate level.

Methods:
A team of medical doctors who were certified in international board of lifestyle medicine and holding Masters Degree in medical education designed, developed, and implemented lifestyle medicine curriculum in undergraduate teachings. At the medical college, based on World Federation of medical education standards, an internationally accredited system based spiral integrated modular curriculum has been utilized. Harden's 10 rules of curriculum design were used as a theoretical framework for integrating LM content in undergraduate medical education.

Results:
Content of lifestyle medicine was embedded in undergraduate medical curriculum through a rigorous process of academic team member and board of faculty. teaching learning methodology along with assessment strategies.

Conclusion:
This write-up describes the evidence-based approach used to embed lifestyle medicine content in Undergraduate Medical Education and offers guidance to other undergraduate medical colleges that may wish to implement lifestyle medicine content to improve lifestyle medicine knowledge and practices of future doctors to not only reduce disease burden but also optimize health.

Take-Away Message:
Lifestyle medicine should be part of undergraduate medical curriculum, integrated from basic to clinical sciences. This will help graduates to practice lifestyle as primary modality on patients and improve their own health through reducing burnout.

ABSTRACT ID:
ORF-CUD03

Strategies and Challenges in Integrating One Health in Medical Education: A Systematic Review

Amalka R Chandraratne[1], Sameera A Gunawardena[2]
[1]*University of Sri Jayewardenepura, Sri Lanka,* [2]*IMU University, Malaysia*

Background:
Incorporating One Health into higher education programs is increasingly recognized as an essential need for addressing global health challenges. However, there is little awareness of the educational concepts related to One Health. This systematic review of published literature was conducted with the aim of consolidating information on integrating One Health concepts in medical education.

Methods:
We searched PubMed and SCOPUS databases for original articles and reviews published in English with no date restrictions. Accordingly, 63 papers were identified as primary studies by two independent reviewers, from an initial pool of 303 studies. The extracted data was then narratively interpreted according to the expected competencies and outcomes, pedagogical approaches, challenges and limitations.

Results:
Content areas for linking One Health principles to medicine were primarily in antimicrobial resistance, zoonotic illnesses, climate-sensitive illnesses and climate-induced illnesses. The most preferred pedagogical approaches to incorporate One Health were problem-based, case-based learning, interdisciplinary role play, community engagement projects, field experiential learning and research. Among the scientific fields of study, veterinary medicine was identified as the highest contributor to One Health, followed by environmental sciences, food science and technology, pharmaceutics and public health. Several knowledge competencies were identified including ecosystem health, infectious disease management and animals as sentinels for outbreaks. Among the skill competencies, the ability to elicit a history of human-animal-environment interactions was highlighted

Conclusion:
Veterinary medical programs currently provide the best role model for integrating One Health concepts into undergraduate and postgraduate training in health-related sciences including medicine. Interprofessional education plays a pivotal role in ensuring the efficacy of integrating One Health into medicine and requires a paradigm shift in the current siloed culture of medical education. Though several higher educational institutions have developed clear competencies and expected outcomes, several challenges still exist in their overall applicability within the healthcare professions.

Take-Away Message:
Incorporating One Health into the medical curriculum will equip healthcare professionals to recognize the interconnectedness of human, animal and environmental health when facing global health challenges. This review identified antimicrobial resistance, zoonotic illnesses, climate-sensitive illnesses and climate-induced illnesses as key content areas for linking One Health to Medical education. Veterinary medical programs currently provide the best role model for integrating One Health concepts. A recognized modality to safeguard successful outcomes in implementing One Health practices is for medical institutions to adopt interdisciplinary curricula that foster collaboration.

ABSTRACT ID:
ORF-CUD04

Integrating One Health into Medical Education: A Competency-based Learning Module for Enhancing Medical Students Understanding, Attitudes and Actions towards Sustainable Environment

Surapaneni Krishna Mohan[1]
[1]*Panimalar Medical College Hospital & Research Institute, India*

Background:
'One Health' is an increasingly important concept in medical education, emphasizing the interconnectedness of human, animal, and environmental health. Integrating One Health into the curriculum can prepare medical students to tackle complex health issues that transcend traditional boundaries. The primary objective of this module was to incorporate one health into the medical curriculum, focusing on enriching students' knowledge, attitudes and practices. This aligns with the Sustainable Development Goal of Climatic Action fostering a new generation of medical professionals who are not only competent in their clinical roles but also committed to the principles of sustainability and global health stewardship.

Methods:
A cohort of 30 fourth-year medical students participated in this four-week module, which was structured as part of a competency-based education framework. The course utilized a mixed-methods evaluation, incorporating both quantitative and qualitative assessments

to measure shifts in students' knowledge, attitudes, and skills regarding one health. The module curriculum included lectures, interactive workshops, and project-based learning focused on eco-friendly healthcare practices, with pre- and post-elective assessments to evaluate the impact of the course.

Results:
The evaluation revealed significant improvements in students' understanding of one health concepts and challenges, with a notable increase in knowledge scores post-elective ($p < 0.05$). Students demonstrated a marked enhancement in their attitudes towards global protection, recognizing its importance in promoting human, plant, animal and environmental health. Furthermore, the course effectively equipped students with practical skills for implementing sustainable practices in healthcare settings for environment and human health.

Conclusion:
Integrating a one health elective into the medical curriculum proved effective in enhancing fourth-year medical students' competencies in sustainable healthcare practices. This initiative underscores the critical need for medical education programs to adapt and include one health principles, aligning future medical practice with global sustainability goals.

Take-Away Message:
The integration of a planetary health elective in medical education represents a critical step forward in aligning healthcare practices with global sustainability goals. This initiative effectively enhances students' knowledge, attitudes, and practical skills regarding environmental protection and sustainable healthcare. As the world grapples with increasing environmental changes impacting global health, medical educators are urged to incorporate planetary health into their curricula to foster a new generation of medical professionals who are not only clinically competent but also committed to sustainability and environmental stewardship. This shift is essential for ensuring that future healthcare providers are equipped to address complex global health challenges in a manner that promotes both human and planetary health.

ABSTRACT ID:
ORF-CUD05

Opportunities and Challenges of Integrating One Health into Health Professions Education: Insights from Interdisciplinary Professionals

Russell Franco D'Souza[1], Mary Mathew[2]
[1]UNESCO, Australia, [2]Kasturba Medical College, India

Background:
The One Health initiative, promoting an integrative approach across human, animal, and environmental health sectors, faces both opportunities and challenges in its incorporation into health professions education. This study investigates how educators perceive these elements and identifies strategies to effectively integrate One Health principles into curricula.

Methods:
Utilizing a qualitative research design, this study engaged health professions educators from diverse institutions through semi-structured interviews. Participants were purposively selected to cover a range of disciplines including medicine, nursing, dental and allied health sciences. Interviews focused on experiences, perceived benefits, and obstacles related to One Health educational integration. Data were transcribed verbatim and analyzed using thematic analysis to extract predominant themes

Results:
Analysis revealed a strong acknowledgment of the importance of One Health in addressing global health challenges such as zoonotic

diseases and antibiotic resistance. Educators identified significant opportunities for enhancing interdisciplinary collaboration and developing a more holistic understanding of health among students. However, challenges were also prominent, including curriculum overcrowding, lack of qualified faculty, and insufficient institutional support. Notably, the need for better resources and clearer implementation strategies were highlighted as critical to overcoming these barriers.

Conclusion:
The study concludes that while the integration of One Health into health professions education offers substantial benefits in fostering a comprehensive health perspective among future professionals, it is currently limited by significant structural and resource-related challenges. Effective integration requires strategic planning, including the development of specific educational resources, training for educators, and administrative support to ensure that One Budgets and logistical arrangements are prioritized for One Health initiatives. This research underscores the need for a collaborative approach to reform educational frameworks and better prepare health professionals for emerging global health challenges.

Takeaway Message:
The 'Converging Paths' event demonstrates the critical importance of fostering interdisciplinary collaboration to effectively implement the One Health approach in health professions education. By bringing together diverse health disciplines, such networking events not only enhance understanding and readiness for integrated health initiatives but also build confidence among professionals to engage effectively in cross-disciplinary teams. This collaborative spirit is essential for addressing the complex health challenges of today and tomorrow, emphasizing that holistic solutions are best developed through the collective expertise of multiple fields.

ABSTRACT ID:
ORO-CUD01

What I Wish I Knew: Identifying perceived knowledge gaps in first-year UK doctors

Emily Morris[1], Sonia Johnson[1], Ella Dunlop[1], James Hughes[1], Nicholas Farmer[2], Robbie Adamson[2]
[1]Oford University Hospitals NHS Foundation Trust, United Kingdom,
[2]Portsmouth Hospitals University NHS Trust, United Kingdom

Background:
The transition from medical school to clinical practice is a critical time for first-year physicians, who report reduced confidence in their knowledge and acute patient assessments. There is a paucity of literature characterising knowledge deficits, which could be used to devise novel 'bridging' curricula. This study aimed to identify knowledge deficits in first-year physicians through direct and indirect methods.

Methods:
The Foundation Doctors Handbook app is a digital resource providing patient assessment and management guides for Foundation Year 1 doctors (F1). App data was gathered on document views by active users. Separately, a cross-sectional study was conducted on UK F1s, between March and June 2024. An online questionnaire was nationally distributed: asking doctors to retrospectively disclose what topics they would have liked additional teaching on prior to onboarding. Responses were independently analysed with duplicate line-by-line coding: each code reflecting a discrete knowledge gap. Recruitment continued until no further codes emerged, indicating response sufficiency.

Results:
Between August 2022 and 2023, the Foundation Doctors Handbook app had 4,849 active F1 users, who viewed app documents

206,605 times. The top ten viewed documents related to chest pain assessment (41.5% of F1s), electrolyte abnormality management (40.5% of F1s), deteriorating patient management (29.9% of F1s) and ABG analysis (18.9% of F1s). 51 questionnaire responses were received: resulting in 29 coded knowledge gaps which were merged into ten domains. 42 (82.4%) participants raised a specific prescribing concern, of which anticoagulation (43.1%), diabetes (29.4%) and fluid (29.4%) therapies were most common. 52.9% of participants requested further teaching on common acute on-call assessments: while 35.3% raised concerns about death verification and certification.

Conclusion:
With good agreement between app data and questionnaire responses, future curricula should address perceived gaps in maximally interactive, case-led sessions.

Take-Away Message:
The 'Converging Paths' event demonstrates the critical importance of fostering interdisciplinary collaboration to effectively implement the One Health approach in health professions education. By bringing together diverse health disciplines, such networking events not only enhance understanding and readiness for integrated health initiatives but also build confidence among professionals to engage effectively in cross-disciplinary teams. This collaborative spirit is essential for addressing the complex health challenges of today and tomorrow, emphasizing that holistic solutions are best developed through the collective expertise of multiple fields.

ABSTRACT ID:
ORF-CUD06

The Developmental Growth of Interprofessional Identity: A Narrative Review

Bulan Kakanita Perumal [2], Gandes Retno Rahayu[1], Eti Poncorini Pamungkasari[2]
[1]*Universitas Gadjah Mada, Indonesia,*
[2]*Universitas Sebelas Maret, Indonesia*

Background:
To become collaborative practice-ready health professionals, students must have a sense of belonging and be a member of an interprofessional community in the health care system, it is called interprofessional identity. The purpose of this study is to explore the developmental process of the interprofessional identity of health professional students.

Methods:
This study used a narrative literature review. Articles were selected from the Scopus database using the search terms "student or learner" and "interprofessional identity".

Results:
The formation of an interprofessional identity requires a gradual process and takes a long time. This stage of the process of forming an interprofessional identity is called interprofessional socialization. The socialization process starts with someone choosing to become a health professional student, then they face the stage to overcome barriers in social interaction with other health professional students. These barriers are broken down by an open environment and mutual trust is formed through optimal contact conditions. The next stage is interprofessional role learning where health profession students will gain insight into their own profession and other professions. Lastly, students can form a dual identity by reaffirming their adjusted professional identity and adopting an expanded interprofessional identity to be ready for collaborative health practice. Repeated interprofessional exposure

over a long time in a longitudinal curriculum is mentioned benefit to facilitate the development of team maturity and optimal interprofessional competence. Intergroup Contact Theory states that starting from 'initial contact', it takes time for cross-group friendship to occur until a feeling of a 'unified group' is formed. Another study also mentioned that a variety of experiences that occur throughout the professional development trajectory may foster an interprofessional identity.

Conclusion:
Longitudinal, integrated interprofessional learning programs may result in a more long-lasting impact on interprofessional identity and these types of programs should be the focus of future research.

Take-Away Message:
There is a need to implement a longitudinal IPE curriculum and examine the influence of longitudinal interprofessional education on the socialization and interprofessional identity of health professions students.

ABSTRACT ID:
ORF-CUD07

Evaluation of the International Borneo One Health Summer Camp (IBOHSem) Based on the Context, Input, Process, and Product (CIPP) Model

Zulkhairul Naim Sidek Ahmad[1]
[1]*Universiti Malaysia Sabah, Malaysia*

Background:
'The One Health approach integrates human, animal, and environmental health. Effective educational programs are essential for developing competencies in these interconnected fields. This study evaluates IBOHSem using the CIPP model.

Methods:
The CIPP model was used to evaluate the program. The evaluation included the following components: (a) Context: This step identified the need for the program and its relevance to participants. The questionnaire was distributed and interviewed among stakeholders to understand their demand for One Health education and their specific interests. (b) Input: This step assessed the resources, planning, and curriculum design. This included assessing the team's expertise, the appropriateness of educational materials, and logistical support for the program. (c) Process: This step monitored the project's implementation, focusing on participant engagement, activity effectiveness, and facilitation quality. The data was collected through direct observations, participant feedback, and facilitator notes. (d) Product: The outcomes in terms of participants' competencies based on One Health competencies using pre- and post-camp surveys, focus groups, and individual reflections.

Results:
For context evaluation, there was a strong need for experiential learning in health education, with 90% of respondents highlighting the importance of understanding interconnected health issues. Input evaluation gathered from a multidisciplinary team comprised of public health experts, veterinarians, environmental scientists, and educators. The curriculum was well-received, with all stakeholders agreeing that it was comprehensive, engaging, and relevant. Logistical planning was efficient, ensuring a smooth execution of the camp. The process evaluation rated the activities as highly effective, noting that interactive lectures and fieldwork particularly enhanced learning. Facilitator reflections indicated that the camp environment was conducive to experiential learning and collaboration. Successful project completions and presentations demonstrated the One Health competencies for product evaluation.

Conclusion:
The CIPP model provided a comprehensive framework for evaluating IBOHSem,

highlighting its success in meeting educational needs.

Take-Away Message:

1) The Context, Input, Process, and Product (CIPP) model provides a comprehensive framework for evaluating educational programs.

2) The CIPP model provides a holistic view of the program's strengths and areas for improvement, facilitating continuous enhancement of the program. It encourages ongoing assessment and iteration.

3) By employing the CIPP model, organizers can ensure that the program is not only well-structured and effectively executed but also impactful in fostering essential One Health competencies among participants.

ABSTRACT ID:
ORF-CUD08

Deciphering Student Needs for Learner Centered One Health Module: A Qualitative Exploration

Sreenidhi Prakash[1], Surapaneni Krishna Mohan[1]
[1]Panimalar Medical College Hospital & Research Institute, India

Background:
The need to integrate one health principle in Health Professions Education (HPE) is increasingly acknowledged as the world faces complex health challenges worsened by changes in environment and biodiversity. This integration is crucial for an interdisciplinary collaboration across human, animal and environmental health to mitigate global health disparities and contribute towards the attainment of Sustainable Development Goals. Incorporating these principles requires understanding student perspectives to build learner-centered modules.

Methodology:
This qualitative exploration employed semi structured interview and collaborative discussion with medical, nursing and allied health science students. Thematic analysis was performed to discern their needs and preferences for one health module with emphasis on resources, content, teaching modality and assessment.

Results:
The study revealed that students were inclined towards practical application, interdisciplinary approach and active learning methods in one health training. They advocated for interdisciplinary workshops, fieldwork and community projects, case-based learning, simulation, research projects and internships in addition to conventional teaching methods.

Conclusion:
The study emphasizes the need to embed One health competencies into medical education curricula with an integrated, hands-on and experiential learning approach. By aligning one health module development with student needs, educators can refine learning outcomes and ensure holistic development of future healthcare providers capable of tackling complex and interconnected global health problems.

Take-Away Message:
Students underscored the significance of practical relevance and suggested experiential learning methods and interdisciplinary approaches in one health training. Student-centered one health training module enhances learning outcomes and cultivates versatile healthcare professionals.

ABSTRACT ID:
ORF-CUD09

Engaging Medical Students with One Health Volunteerism through Short-Term Experiences in Global Health (STEGH) - Opportunities and Challenges from Novel Field Programme

Jyotsna Needamangalam Balaji[1], Surapaneni Krishna Mohan[1]
[1]*Panimalar Medical College Hospital & Research Institute, India*

Background:
The objective of this investigation is to assess the effectiveness of engaging medical students with One Health volunteerism through Short-Term Experiences in Global Health (STEGH). The study aims to understand how such programs can enhance students' knowledge, attitudes, and skills related to One Health concepts. The research question focuses on the opportunities and challenges encountered in implementing a novel field program designed to integrate One Health volunteerism into medical education.

Methods:
A mixed-methods study design was employed, combining quantitative surveys and qualitative interviews. Twenty four final-year medical students from Panimalar Medical College participated in this 2-week STEGH program in rural India. The program included community health assessments, veterinary health advocacy and environmental health initiatives. Pre- and post-program surveys measured changes in students' knowledge and attitudes towards One Health. In-depth interviews were conducted to explore students' experiences, perceptions, and the challenges they faced during the program.

Results:
Quantitative analysis of survey data showed a significant increase in students' understanding of One Health concepts, with the mean knowledge score rising from 50% pre-program to 80% post-program ($p < 0.001$). Attitudinal shifts were also observed, with 85% of students expressing a stronger commitment to incorporating One Health principles into their future practice, compared to 55% before the program. Qualitative interviews highlighted the program's positive impact on students' interdisciplinary collaboration skills and cultural competence. However, challenges such as language barriers, limited resources, and adapting to different healthcare settings were frequently mentioned.

Conclusion:
The STEGH program effectively enhanced medical students' knowledge and attitudes towards One Health, demonstrating the value of integrating volunteerism into medical education. The findings suggest that despite challenges, such field programs provide invaluable opportunities for experiential learning and interdisciplinary collaboration. These results support the inclusion of One Health volunteerism in medical curricula to better prepare students for global health challenges.

Take-Away Message:
Integrating One Health volunteerism through Short Term Experiences in Global Health (STEGH) into medical education significantly enhances students' knowledge, attitudes, and interdisciplinary collaboration skills. Despite challenges like language barriers and resource limitations, such programs offer invaluable experiential learning opportunities that prepare future healthcare professionals to address global health challenges effectively.

ABSTRACT ID:
ORO-CUD02

Think Global, Act Local: Patient Safety in Health Professions Education: An Inter-Professional Module on International Patient Safety Goals

Monica Gupta[1], Mustafa Ranapurwala[1], Anand Ramakrishna[2], Lulu Sherif Mahmood[3]
[1]*Pramukhswami Medical College, India*,
[2]*Kasturba Medical College, India*,
[3]*Father Muller Medical College, India*

Background:
Interprofessional (IP) education (IPE) and training in Patient Safety (PS) though acknowledged globally, is not available in any of the Health Professions (HP) Education (HPE) curricula in India. We present an innovative module on PS and its integration in the health professions curriculum in India, based on International Patient Safety Goals (IPSG).

Methods:
This is an educational, interventional, mixed method study using descriptive analysis for quantitative data and qualitative analysis for reflections and feedback from learners and faculty. The module was designed based on Kern's 6 steps of curriculum development and 12 strategies recommended by El-Awaisi et al; finalised through 5 rounds of focus group discussions; and validated by 12 experts, using Delphi technique. The two-week module ran through 25 hours, integrating sessions with existing clinical postings of 24 participants (medical and physiotherapy interns; nursing students). An experiential learning approach was used, combining theory with case-based learning, observation, role-plays, audits, interactive games and best practice videos. Summative assessment, reflections, learner and faculty feedback and the Interprofessional Collaborative Competency Attainment Scale (ICCAS, 2018) were utilised for evaluation.

Results:
The significant difference between the pre-/retro-pre and post-test assessments in the paired t-tests for assessment of knowledge ($p < 0.001$); and for IP competencies ($p < 0.01$) indicates attainment of desired competencies by learners (Kirkpatrick level II). In practice, learner feedback and reflections predict safe behaviours (Kirkpatrick level III)..

Conclusion:
A felt gap in the Indian HPE is addressed since core IP competencies and critical PS concerns, are addressed. In the long run, it will lead to reduced adverse events, better patient outcomes and therefore, health improvement at Bhaikaka University and other institutions. The module's comprehensive coverage of key PS aspects in a contextual, simple, and adaptable manner should encourage professional councils/institutions to adopt it..

Take-Away Message:
This innovative curriculum effectively equips future doctors, nurses, and physiotherapists with the essential skills to deliver safe, collaborative care across disciplines. It is a vital step towards the "One Health" approach by seamlessly integrating essential patient safety practices, resulting in significantly improved health outcomes for all.

Faculty Development

ABSTRACT ID:
ORF-FAD01

Consuming Knowledge Consciously: Empowering Young Educators in Allied Eye Health

Snigdha[1], Avinash Pathengay[1], Vijay Kumar Yelagondula[1]
[1]*L V Prasad Eye Institute, India*

Background:
In the field of Allied Eye Health education, there is a need to develop a young team of educators

who can bring fresh perspectives and connect better with the learner's generation. CKC aimed to address the challenge by training a newly recruited team of educators with limited experience. It focused on dual objective: advancing their clinical expertise and equipping them with effective teaching skills.

Methods:
The CKC program is a four-month intensive training followed by ongoing periodic workshops and mentorship. The curriculum covered various modules including clinical sub-specialities, pedagogy and assessments, foundational skills, educational psychology, academic research, social media usage, mentoring, teamwork, and leadership.

CKC in Action:
TRecognizing the overwhelming amount of information available, CKC emphasized 'consuming knowledge consciously'. The program equipped educators with skills to curate relevant information, integrate it with their clinical practice, and ultimately maximize their learning. Active learning strategies were employed to encourage educators to take ownership of their learning journey. The coursework was divided into four stages: attention, retention, application, and reflection. Educators were encouraged to replicate these strategies in their own classrooms.

Results:
CKC fostered the development of metacognitive abilities and a growth mindset among educators. This resulted in a confident and proficient teaching team, who are seen as role models in their profession. The program has led to a significant decrease in attrition in this cadre of clinicians and has demonstrably improved the quality of teaching, impacting the learning of over 900 trainees within the organization and beyond.

Conclusion:
CKC encourages a thoughtful and discerning mindset, ultimately leading to a more engaging and relevant learning experience for students ensuring the integrity and quality of the knowledge being imparted. It highlights the transformative power of well-designed faculty development programs in enhancing medical education and ultimately improving patient care.

Take-Away Message:
The much discussed, yet underserved area of focused faculty development programs need serious attention from academic institutions. Developing a young team of educators is often challenging but nevertheless a timely investment for the next generation.

ABSTRACT ID:
ORO-FAD01

The Benefit of Objective Structured Teaching Evaluation (OSTE) by 'Group'

Chia-Hung Chen[1], Li-Chen Chang[1], Yung-Chi Cheng[1], Yu-Hsuan Hou[1], Chao-Yu Hsu[1], Huei-Jung Ou[2]
[1]Chia-Yi Christian Hospital, Taiwan,
[2]Taitung Christian Hospital, Taiwan

Background:
Structured Teaching Evaluation (OSTE) provides a platform for instructors to refine their teaching skills and receive constructive feedback on their performance. Here, we presented the benefit of OSTE by 'group'.

Methods:
On September 14, 2023, we conducted an OSTE employing a group-based methodology. There were four stations, and each station allocated a 15-minute interval, which included both the viewing of a 7-minute video and the subsequent formulation of answers. Following the OSTE, a focus group interview was conducted, contingent upon the instructors' consent. The qualitative analysis in this study was based on the verbatim transcripts derived from these interviews.

Results:
A total of 24 instructors were divided into

four groups, with each group consisting of six instructors. Nine instructors consented to participate in the interviews, and the interview had a duration of 43 minutes. The qualitative analysis findings indicated that instructors experienced reduced anxiety and a heightened ability to express themselves openly during OSTE when conducted within a group format. Moreover, the instructors acknowledged that group dynamics facilitated the acquisition of diverse perspectives. Additionally, the affirmation and endorsement of one's viewpoints by peers were recognized as a means of bolstering personal confidence.

Conclusion:

Instructors exhibited reduced anxiety and increased self-expression during group-based OSTE. In addition, group dynamics facilitated diverse perspectives and bolstered personal confidence. With the aforementioned benefits, the implementation of OSTE in a group setting becomes a viable method for assessing instructors.

Take-Away Message:

1. Instructors exhibited reduced anxiety and increased self-expression during group based OSTE. In addition, group dynamics facilitated diverse perspectives and bolstered personal confidence.
2. With the aforementioned benefits, the implementation of OSTE in a group setting becomes a viable method for assessing instructors.

ABSTRACT ID:

ORF-FAD02

Unlocking Insights: Evaluating Learning to Life of Certified Faculty in Health Professions Education

Rabia Aftab[1]
[1]*Aga Khan University, Pakistan*

Background:

This research study assessed content taught in certificate course in health professions education to the teaching faculty and practical utilization of the pedagogical approaches, curricular designs and the tangible impact of the CHPE certification among faculty members engaged in teaching and assessment of health professions education students

Methodology:

A descriptive observational study conducted on Teaching Faculty done with CHPE from Public and Private institutes. Duration was three months after the approval of by the ERC. Purposive sampling was done where sample size was 278. A well-structured questionnaire was used which was validated by medical educationist. Data was analyzed using SPSS and thematic analysis was done on qualitative data.

Results:

200/280 faculty members fill up the questionnaire completely with the response rate of 71%. Almost equal number of Faculty members were from private and public Institutions. There were more females (71%) then males (29%). The findings showed that the CHPE courses cover majorly teaching and assessment methods and less content on curriculum development, Faculty perceived that applying Affective Domain (65%) and new teaching methods (45%) in their teaching practices were a challenge. Moreover, they highlighted that the time constraints (54%) and lack of Institutional support (50%) were major barriers that hinders faculty application of knowledge. Faculty reported improvement in their teaching, assessment and communication skills by applying principles taught in the course.

Conclusion:

This research contributes in describing the role of CHPE courses in improving faculty teaching and assessment skills. By highlighting both the effectiveness of these course and the mechanisms underlying its impact, this study informs efforts required to promote these courses and reduce the barriers hinders in applying the learned content in educational settings for the professional growth of the faculty and improvement in quality education.

Take-Away Message:
Faculty development programs play a crucial role in strengthening the expertise and effectiveness of educators within academic institutions. These programs are essential for equipping faculty members with the necessary skills, knowledge, and resources to excel in their roles as educators, researchers, and mentors. By incorporating faculty development initiatives into institutional frameworks, educational institutions can cultivate a cadre of highly skilled and motivated faculty members who are better equipped to meet the diverse needs of students and contribute meaningfully to the advancement of knowledge in their respective fields.

Professionalism and Ethics

ABSTRACT ID:
ORO-PAE01

Shaping Prospective Doctor Generations: Clinical Learning Environment and Professional Identity in Medical Students

Fatma Ashraf Abouelyazied Mohamed[1], Nourhan Fawzy Wasfy[1], Sally Fouad[1], Nahla Hassan[1]
[1]*Suez Canal University, Egypt*

Background:
Professional identity refers to the physician's beliefs about the meaning of being a good doctor and how he or she thinks he or she should behave. Professional identity is the spectacular final destination of the journey of medical school. Students enter medical school with a preformed personal identity that is further developed under the influence of different socialization experiences inside the learning environment especially in clinical years as they start to have significant contact with physicians, other health professionals, and patients. Thus, the clinical learning environment is a pivotal factor in the process of professional identity development.

Aim:
This study aims to improve the professional identity development of medical students.

Methods:
A descriptive cross-sectional study design with mixed qualitative and quantitative methods. The professional identity questionnaire was used to measure students' professional identity and The Dundee Ready Education Environment Measure was used to assess the clinical learning environment. Sequentially, a focus group discussion was conducted for a deeper insight. The study included 404 participants, and 7 students participated in a 130-minute focus group discussion.

Results:
The study documented a strong correlation between professional identity and clinical learning environment at a significance level <0.01. The qualitative scrutiny generated 5 themes: (1) Students' perception regarding Medicine as a profession; (2) Physician's characteristics; (3) Social interactions; (4) Enabling factors to professional identity development; and (5) Hindering factors to professional identity development.

Conclusion:
The strong positive correlation between Professional identity and clinical learning environment with emphasis on enabling and hindering factors within the environment emphasizes the need for a multifaceted approach to enhance professional identity development in medical students. Identifying the professional identity from students' perspectives and factors influencing its development gives an insight into the fundamental aspects of this approach.

Take-Away Message:
The clinical learning environment is fundamental to professional identity development. It shapes their beliefs of how

the physician thinks, feels, and acts. Therefore, knowing what clinical learning environment aspects we need to enhance to support our medical students while their professional identities are being shaped is essential.

ABSTRACT ID:
ORF-PAE01

Reflective Writing Skills Among First Year Medical Students in Universiti Sains Malaysia (USM) and its Associations

Liyana Nadhirah[1], Azizah Othman[1], Kamarul Aryffin Baharuddin[1], Muhamad Saiful Bahri Yusoff[1], Nurhanis Syazni Roslan[1]
[1]Universiti Sains Malaysia

Medical students across many countries still showed limited competency in reflective writing skills. However, reflective writing has been proposed to foster reflective practice which is important in clinical practice. Hence, this study aimed to determine the level of reflective writing skills among first-year medical students in Universiti Sains Malaysia (USM) and its associations with demographic factors, academic and clinical performance. The study randomly selected 350 (82.9%) reflective writing documents from a total of 422 documents submitted by first-year medical students in the Medical Professionalism course. These documents were graded by four calibrated raters using Reflection Evaluation for Learners' Enhanced Competencies Tool (REFLECT) rubric tool, designed to assess written reflections. Demographic factors included age, sex, pre-university education, Mini Multiple Interview (MMI) scores, Cumulative Grade Point Average (CGPA) of the first and third year, and Objective Structured Clinical Examination (OSCE) scores in third year. Descriptive data and statistical data (Pearson or Spearman for continuous variables, and independent T-test or one-way ANOVA for categorical variables) was performed using SPSS version 27.0. The average total reflective writing score for first-year medical students was 15.21 (SD = 2.18) out of 20. Female students reported significantly higher total reflective writing scores (M = 15.42, SD = 2.19) and "attending to emotion" scores (M = 3.22, SD = 0.59) compared to male students (M = 14.71, SD = 2.09, and M = 2.81, SD = 0.68, respectively). This study also reported significant correlation between first year CGPA and several domains of reflective writing. In conclusion, the study indicates that reflective writing skills among medical students at USM is influenced by sex and it has a significant role in academic performance. Fostering reflective writing should be promoted in medical training by considering inclusive approaches that incorporates sex-sensitive pedagogies.

Take-Away Message:

1. Reflective writing skills is influenced by sex. Instructional strategies should consider the linguistic patterns and cognitive styles of male and female students.
2. Reflective writing correlates with academic performance. Institutions should incorporate reflective writing in the curriculum and empower faculty members to give feedback.

ABSTRACT ID:
ORF-PAE02

Description of The Professional Identity of First-Level Clinical Medical Students and The Various Factors That Facilitate Its Formation

Nathalia Haryanti[1], Natalia Puspadewi[1], Veronica Dwi Jani Juliawati[1], Gisella Anastasia[1]
[1]Atma Jaya Catholic University of Indonesia, Indonesia

Background:

A well-developed professional identity enhances the quality of healthcare services provided by care providers. It shapes the individual values and principles that each

care provider, including physicians, upholds in their professional practice. This study aimed to identify: 1) the characteristics of the professional identity (PI) of five first-year clinical students; 2) the role of clinical teachers and other factors influencing PI formation during clinical rotations; and 3) how the learning process at the clinical level enables students to participate and gain recognition.

Methods:
This study employed a qualitative phenomenological approach. It was open to any first-year clinical students who were in the midst of their major clinical rotations at the time of data collection and met the inclusion criteria. In-depth interviews were conducted as soon as an interested student contacted the research team. In the end, five first-year clinical students participated in the study. All interviews were voice recorded, transcribed verbatim and analyzed using thematic analysis.

Results:
All five participants had distinct definitions of their professional identities. Nevertheless, they all highlighted the following points: a) Technical skills and internal values are fundamental components that shaping their professional identities; b) Clinical teachers serve as role models and offer participants essential recognition and opportunities to engage in a community of practice, thereby aiding their professional identity formation during clinical rotations; c) The formation of their professional identities was supported by various learning experiences integrated into their medical school curriculum.

Conclusion:
Technical skills and internal values are key elements that shape a professional physician's identity. The curriculum design and the role of clinical teachers who engage closely with students during their clinical rotations are crucial in fostering a supportive learning environment that aids in the development of students' professional identity.

Take-Away Message:
- Role models are important figures for students, so as educators, lecturers need to be proactive in the process of forming students' professional identities.
- The learning curriculum needs to be designed intentionally to support the formation of students' professional identity.

ABSTRACT ID:
ORF-PAE03

Medical Ethics and Professionalism Go Beyond Human Life!

Zhen-Hua Chin[1], Meow-Keong Thong [1], PP Leong[1], HT Ong[1]
[1]*Universiti Tunku Abdul Rahman (UTAR), Malaysia*

Background:
Medical professionalism and ethics (MPE) are important component in undergraduate medical curriculum. Contents of professionalism include good clinical practice, compassion and empathy while ethics include principles of confidentiality, justice, respect patient's autonomy, beneficence and non-maleficence. This proposal paper aims to describe the importance of delivery the teaching of professionalism and ethics go beyond human being to include entire life forms in the environment as one health issue. Currently MPE are mostly focus on handling patients and research. Overuse and misuse of antibiotic causes antibiotic resistance. Extensive genetic modifying in insects, animal and plants can disrupt the food web cycle and long-term effects remain unknown. We need to relook at the concept of professionalism and ethics in a more holistic manner.

Methods:
Specific topics on ethics in environment will be incorporated in pre-clinical Problem-Based Learning (PBL) sessions. Topics such as weather changes, animal and plant extinction can be included. Learning outcomes focus on MPE will be given and students are encouraged to

discuss these topics. Facilitator will guide the students in applying principles of ethics such as respect life, beneficence and maleficence.

Results:
Students are expected to acquire knowledge on MPE in the context of accepting other living creatures, plants, insects, land and aquatic creatures as part of equilibrium affecting human life. Ethics of non-maleficence, respect all life forms with empathy and compassion and duty to protect the environment shall be applied in their future practice. Reflective report will be the formative assessment.

Conclusion:
In conclusion, MPE shall go beyond human to include all life forms and environment. Students shall have early exposure in this area and early introduction of MPE in undergraduate medical curriculum can meet this objective.

Take-Away Message:
Ethics and professionalism shall go beyond human to include all life forms and environment

Stakeholder Engagement

ABSTRACT ID:
ORF-STE01

Exploring Trainee Perspective on Postgraduate Surgical & Allied Education at a Private Tertiary Care Hospital: A Mixed Method Study

Aun Ali[1], Rabia Aftab[1]
[1]*Aga Khan University, Pakistan*

Background:
Conducting learner needs assessments and ongoing program evaluations may facilitate the identification of areas for improvement and contribute to a reduction in dropout rates. The primary objective of this study is to evaluate the learning needs and challenges faced by trainees with the aim of enhancing the effectiveness, efficiency, and quality of surgical and allied training programs.

Methods:
For this study, we adopted mixed method research design. For quantitative data, a 33 item electronic questionnaire surveys were sent to all 51 surgical and allied postgraduate trainees having six domains. For qualitative data focus group discussions were conducted with 12 residents. A thematic analysis framework was used for the data analysis, resulting in the development of study themes.

Results:
Forty-five out of fifty-one trainees responded to the survey (88%). The residents were satisfied with the current residency program (52%); however, we identified that the respondents reported perceived lack of rotation-specific learning objectives achieved (53%), lack of surgical exposure to fulfil learning requirements (71%), lack of formal system by which trainees can provide feedback about their supervisors & rotations (80%), lack of elective rotations (45%). The FGD data generated three main themes. Five focus groups included 33 total participants in 3 attending (n=20) and 2 resident (n=13) groups. Thematic analysis of focus group transcripts identified 7 themes which were organized into 3 thematic categories: (1) unstructured feedback system, (2) Strength of residency program, and (3) assessment and evaluation system.

Conclusion:
This study identified key areas for improvement in the residency program, including the need for clearer rotation-specific learning objectives, more surgical exposure, a formal feedback system, and the inclusion of elective rotations.

Take-Away Message:
To enhance the postgraduate surgical and allied education program, it is essential to establish clear learning objectives for each rotation, increase surgical exposure, implement a formal feedback system, and introduce elective rotations. These changes will better meet the educational needs of trainees and improve their overall training experience.

Student Assessment

ABSTRACT ID:
ORF-SAS01

Knowledge, Skills, and Compliance of Nurses on Central-Line Associated Bloodstream Infection in the Cardiovascular Department of King Faisal Hospital & Research Centre.

Vanaja A/P Perumal[1], Yasser Alheraish[2], Muhammad Shahzad[2], Siti Rosnah Maarof[2], Maria Perez[2]
[1]IMU University, Malaysia, [2]King Faisal Specialist Hospital and Research Centre, Saudi Arabia

Background:
Healthcare-associated infections (HAIs), especially central line-associated bloodstream infections (CLABSI), are among the most critical public health problems worldwide. Knowledge, attitude, and skills of nurses are vital in HAI prevention.

Objective:
In this study, we aimed to assess nurses' knowledge, skills, and compliance related to CLABSI.

Methods:
This study was conducted in a heart centre as a prospective interventional study. Eighty nurses were selected after obtaining their consent to participate in the pretest, post-test, and skills review. Qualified nurses registered with the Saudi Council and working for at least one month in the relevant unit at the time of the study were included. Nurse managers, interns, and student nurses were excluded. Nurses' skills were analysed using a competency-based checklist approved by the hospital.

Results:
We enrolled 80 participants in our study. Most participants (51.25%) fell under the age group of 25-34 years. There were 68 females (85%). Participants with an experience of 6-10 years constituted the biggest proportion (37.5%) in the cohort in terms of work experience. The mean CLABSI knowledge-related pretest and post-test scores were 6.7 ±1.09 and 6.8 ±1.11, respectively, while the CLABSI compliance scores were 8.1 ±0.99 and 8.3 ±0.97, respectively.

Conclusion:
Based on our findings, clinical experience of more than five years is associated with good CLABSI knowledge and compliance among nurses. Nurses' level of education also had a significant relationship with CLABSI pretest and post-test scores.

Take-Away Message:
Nurses should be competent and knowledgeable in handling Central line associated blood stream infection. Nurses' compliance and adherence to aseptic technique can help to reduce length of hospital stay. There is competency skill check for nurses prior to assessing the central venous catheter.

ABSTRACT ID:
ORF-SAS02

A Comparative Study of GPT-4 and GPT-3.5 in Modified Essay Questions from Tutorials and Case-based Learning Scenarios in Medical Undergraduate Education.

Natasha Luke[1], Amanda Wong[1], Lee Seow Chong[1], Reshma Taneja[1], Lee Shuh Shing[1], Chen Zhi Xiong[1], Kenneth Ban[1], Dujeepa D. Samarasekera[1], Celestial T Yap[1]
[1]National University of Singapore, Singapore

Background:
Effective adoption of the technology of generative AI in medical education requires the users to be aware of the strengths and limitations of different iterations of generative AI software. In addition, educators should be insightful about the potential impact of generative AI on learning tools such as tutorials and case-based learning. This study

was planned to comparatively evaluate the performance of GPT-3.5 and GPT-4 versions of ChatGPT in answering modified essay questions (MEQs) in two foundational medical sciences, Physiology and Biochemistry, extracted from tutorials and case-based learning scenarios.

Summary of Work:
This study was performed as an extension of a previous study that evaluated GPT-3.5 performance in MEQs, where responses were generated and graded. The answered questions were categorized into five groups according to the scores, and fifteen questions from each subject were selected to represent each of the score categories. Responses were generated in GPT-4 for these questions and were graded. For both GPT-3.5 and GPT-4 answers, grading of each question was done by two examiners and was aided by a marking scheme. In addition to grading, examiners provided qualitative comments for each answer.

Summary of Results:
Mean scores for the 15 Physiology MEQ questions in GPT-3.5 and 4 were respectively 59.2 (SD 32.04) and 68.6 (SD 29.77). For Biochemistry, the mean score for GPT-3.5 was 59.33 (SD 29.08), while for GPT-4 the value was 85.33 (SD 18.48). The difference in mean scores was statistically significant in Biochemistry (p=0.006), and not for Physiology (p=0.4).

Discussion and Conclusion:
ChatGPT was able to provide satisfactory answers for most questions, although deficiencies were observed in both GPT-3.5 and GPT-4 answers. GPT-4 performed better in both subjects with an improvement in overall scores, which is likely attributed to the robustness of training.

Take-Away Message:
Generative AI is a useful educational tool in many ways, particularly in differential learning in medical undergraduate education. Overall superior performance was noted in the GPT-4 version compared to GPT-3.5. In the current state, generative AI tools can't be recommended as a sole educational resource to facilitate medical undergraduate education, and rather be an adjunct tool along with other resources. Users should be aware of the strengths and limitations of different iterations of LLMs and performance differences in various disciplines, including clinical and foundational medical sciences to make optimum use of the technology. Educators may have to review and revise certain learning and assessment tools to ensure the learning objectives are still met in the current generative AI era.

ABSTRACT ID:
ORF-SAS03

Optimizing Student Assessment: Integrating Self-Learning, Peer Interaction, and Mentorship for Micro and Macro Learning

Kavya M Bejjanki[1]
[1]*LV Prasad Eye Institute, India*

Background:
The landscape of medical education is rapidly evolving, requiring innovative approaches to assessment that go beyond traditional methods. As such, this study aims to equip participants with the knowledge and skills necessary to enhance student learning through self-learning, peer-peer learning, and mentor-mentee learning.

Methods:
This retrospective study was conducted at the Standard Chartered-LVPEI Academy for Eye Care Education, LV Prasad Eye Institute, India. Institutional review board of LV Prasad Eye Institute approved this study. The study adhered to the tenets of the declaration of Helsinki. All the trainees completed their post graduation in Ophthalmology and joined the three year fellowship program were included. The trainees who had to discontinue the assessment midway due to personal or health reasons were excluded from the study. This

study was based on the analysis of interview conducted for the trainees as a part of six monthly summative assessment. The study period was between June 2023 and August 2023.

Results and Conclusion:
The integration of clinical pearls within micro learning provides participants with tangible strategies for enhancing memory retention and factual recall among students. Furthermore, the utilization of Bloom's taxonomy in macro learning allows educators to assess students' critical thinking and analytical skills, promoting higher-order learning outcomes. The addition of the U & I video component adds a unique interactive dimension to the workshop, enabling participants to engage in real-time discussions with faculty members on clinical pearls, fostering mentorship opportunities and collaborative learning experiences.

Take-Away Message:
This assessment model is designed to empower educators with practical tools and insights to transform their assessment practices and optimize student learning outcomes.

ABSTRACT ID:
ORF-SAS04

Enhancing Assessment Practices: Medical Students' Reflections on Objective Structured Video Examination

Rabia Aftab[1], Aun Ali[1]
[1]*Aga Khan University, Pakistan*

Background:
Medical educators have always been desirous of the best methods for formative and summative evaluation of trainees. The Objective Structured Video Examination (OSVE) is a method used in medical education and other fields to assess practical skills and knowledge through video-based scenarios. OSVEs present students with video scenarios depicting various clinical or professional situations. This objective of this study was to explore students' perception about the acceptability of OSVE as a formative assessment tool.

Methodology:
A cross-sectional survey was carried out among 52 surgical and allied residents who participated in the final mid-year surgery examination in June 2023. A structured questionnaire consisting of 23 items was used to collect demographic information from respondents and assess their perceptions of the OSVE stations. The questionnaire evaluated aspects such as the quality of instructions and organization, opportunities for learning, authenticity and transparency of the process, and the perceived usefulness of the OSVE as an assessment tool. Participants rated their responses on a 5-point Likert scale ranging from strongly disagree to strongly agree.

Results
Of 52 students, 49 completed the self-administered questionnaire (94%). Students felt that the video scenarios can simulate realistic clinical, providing students with a lifelike experience (80%), allows for consistent and objective grading, minimizing subjective biases in the assessment process (65%), a cost-effective option for assessing practical skills and knowledge (75%), Certain skills, such as hands-on procedures or physical examination techniques, may be better assessed through other formats (73%).

Conclusion:
The survey results provide positive insights into residents' views on the validity, objectivity, comprehensiveness, and overall organization of OSVE within the surgery department. They suggest a need for early introduction of OSVE in the surgical curriculum. The feedback received is valuable and will aid in conducting a thorough evaluation of the process.

Take-Away Message:
As surgical education continues to evolve, incorporating innovative assessment tools like

OSVE can contribute to more effective training programs and better-prepared residents for the challenges of modern surgical practice. However, careful consideration should be given to its implementation, including the development of high-quality video scenarios and standardized grading criteria, to ensure its validity and reliability as an assessment tool.

ABSTRACT ID:
ORF-SAS05

Analysis of Structured Oral Examination as an Assessment Tool in Undergraduate Oral Medicine Training

Amita Aditya[1]
[1]*Dr. D. Y. Patil Dental College and Hospital, India*

Background:
Traditional oral examination (TOE) in Undergraduate Dental Curriculum is often criticized for the lack of objectivity, standardization, and reliability. It is suggested that these perceived limitations may be overcome by the introduction of structured oral examination (SOE). However, there is limited evidence if the implementation of SOE in Oral Medicine & Radiology course has benefits over the TOE or it is just a perception. Hence, this study was planned to analyze SOE as an assessment tool in Oral Medicine & Radiology Training as compared to TOE.

Aim:
The purpose of this study was to investigate the effect of SOE as compared to TOE during formative assessment in Final Year Under Dental graduate students for the subject of Oral Medicine & Radiology.

Methodology:
Nine "Must know" topics were selected from the indicated course. A total of 40 Final year BDS students who gave consent to participate in this study were initially assessed by TOE in the middle of the academic term during their clinical posting-end. The students' perspectives on this assessment were measured by a modified three-point Likert-type scale questionnaire which consisted of questions pertaining the perceived effectiveness, feasibility and acceptability of the assessment method. Following this, faculty members prepared structured questions from the same topics. These questions were from "Must know", "Nice to know" and "Desirable to know" categories of the selected topics and were validated by the peer reviewers. Faculty were calibrated by discussing the correct answers and scoring criteria. Post this, SOE was carried out for each student. As with the TOE process, student feedback was collected via a modified three-point Likert-type scale questionnaire. The mean score obtained by the students from both the methods was calculated and compared using paired t-test.

Results
The results showed no statistically significant difference between mean score obtained by SOE and TOE. However, SOE was found to be more acceptable to students than TOE according to their feedback.

Conclusion:
Result of our study indicated that SOE has potential to be used as an effective assessment tool in training of the subject for Undergraduate Dental students. Its acceptability is higher than the traditional method as it is perceived as fairer and uniform in nature.

Take-Away Message:
A balanced approach with mingling of conventional and newer methods of Oral examination could render more flexibility and reliability in assessing the students.

ABSTRACT ID:
ORF-SAS06

A Mixed Method Study to Explore Educators' and Students' Perspectives on Authentic Assessments of One Health Competencies in Medical Education

Russell Franco D'Souza[1], Mary Mathew[2]
[1]UNESCO, Australia, [2]Kasturba Medical College, India

Background:
As global health challenges necessitate a multidisciplinary approach, One Health competencies are essential for medical professionals. However, a gap exists in the authentic assessment of these competencies within medical education. This mixed-method study investigates how educators and students perceive the authenticity and efficacy of assessments for these competencies in medical education.

Methods:
This mixed methods study included medical students from first to fourth professional years and medical educators of pre, para and clinical department. 2 different structured validated questionnaire with 18 and 21-items on a Five point Likert scale for educators where distributed online. For qualitative analysis semi-structured in depth small group interviews were conducted with students as well as educators to obtain their perspectives on existing assessment methods and insights into newer assessment methodologies to evaluate one health competencies in medical education. Statistical and thematic analysis were used to analyse quantitative and qualitative data respectively.

Results
Both survey and interview responses highlighted a consensus on the critical importance of One Health competencies (94%), alongside a significant dissatisfaction (88%) with how these competencies are currently assessed. Common criticisms included the inability of assessments to capture the interdisciplinary application of skills (85%) and lack of real-world problem-solving elements (92%). The interviews underscored a strong desire for innovative assessment methods, such as community-based and interdisciplinary projects, to evaluate these essential competencies more authentically. While educators mean concerns where about the validity and feasibility of newer assessment methods students express their concerns over increased burden and disinterest towards summative exam-based assessments.

Conclusion:
The findings underscore a critical need for re-evaluation and enhancement of assessment strategies to better align with the multidisciplinary demands of global health challenges. Educators and students alike recognize the shortcomings of traditional assessment methods and advocate for more authentic, real-world, and integrative assessment approaches.

Take-Away Message:
The take-home message from this study is that traditional paper-based assessments in health professions education do not adequately capture the complexity of One Health, which integrates human, animal, and environmental health. There is a crucial need to redefine the concepts of validity and reliability to develop more dynamic and context-sensitive evaluation methods. This shift will better address the interconnected and evolving challenges of One Health and ensure that assessments are both practical and reflective of real-world scenarios.

Teaching and Learning

ABSTRACT ID:
ORF-TAL02

AI Integration in MCQ Development: Assessing Quality in Medical Education: A Systematic Review.

Fizzah Ali[1], Hajra Talat[2]
[1]*Lahore Medical & Dental College, Pakistan*
[2]*FMH College of Medicine & Dentistry, Pakistan*

Background:
The focus of this systematic review is to examine how artificial intelligence (AI) is included in multiple-choice questions (MCQs) and how this affects the efficacy and quality of assessments used in education. Several papers investigating the application of AI in MCQ creation have been found through a thorough literature analysis.

Methods:
The present study employed a systematic literature review (SLR) methodology to provide a comprehensive analysis of the existing literature and underscore the effects of incorporating artificial intelligence into creating multiple choice questions (MCQs) on the standard and efficacy of assessments used in education. Between January 2019 and January 2024, we examined papers from credible publications, concentrating on sixteen chosen articles for in-depth examination.

Results
The results show how AI can revolutionize traditional evaluation methods in education by improving the accuracy, efficiency, and diversity of multiple-choice questions. While AI models like ChatGPT, Bard, and Bing have shown encouraging results in creating multiple-choice questions (MCQs), issues with validity, complexity, and reasoning ability still need to be addressed. Notwithstanding its drawbacks, AI-driven multiple-choice question (MCQ) production holds great potential for enhancing evaluation processes and enhancing educational opportunities in a variety of subject areas.

Conclusion:
The endpoint emphasizes how AI has the potential to revolutionize several fields, including medical education and the development of multiple-choice questions (MCQs). Although AI approaches like ChatGPT and Bing demonstrate potential for automating multiple-choice question production and improving productivity, significant constraints relate to the validity, complexity, and reasoning ability of the questions.

Take-Away Message:
Artificial intelligence (AI) offers a fascinating chance to change several industries, including multiple-choice questions (MCQs) and medical education. Even while AI tools like ChatGPT and Bing have the potential to automate multiple-choice question development and increase efficiency, issues with question validity, complexity, and logic still need to be resolved. Notwithstanding these challenges, incorporating AI into medical education has enormous potential to improve student-teacher engagement and raise the standard of multiple-choice questions. AI has the power to completely transform education and provide a more productive and interesting learning environment when used carefully.

ABSTRACT ID:
ORF-TAL04

Comparative Analysis of Effectiveness Between Flipped Classroom and Lecture-Based Classroom in Undergraduate Medical Education at Alfaisal University.

Dileep Rohra[1], Muhammad R. Sajid[1], Abdul A. Shaikh[1], Muhammad F Ikram[1], Peter Cahusac[1], Ahmed Yaqeenuddin[1], Wael AlKattan[1]
[1]*Alfaisal University, Saudi Arabia*

Background:
The effectiveness of the flipped classroom is currently debated due to conflicting results from different studies. It is therefore important to evaluate its usefulness each time it is applied in a new setting. Thus, this study was conducted with the objective of evaluating the effectiveness and acceptability of the flipped classroom in undergraduate medical education at the College of Medicine, Alfaisal University.

Methods:
This was a quasi-experimental study consisting of development and administration of a flipped classroom with one group of students receiving the flipped classroom (FG) and the other group with the traditional lecture-based teaching (LG). We compared the pre-university enrolment Cumulative Grade Point Average (CGPA), preceding progress test results and previous semester performance for the two groups, which showed no statistical difference.

Results
Since the FG had received the video lecture while the LG had not, there was a clear statistical difference between the groups with FG showing better performance in pre-test scores. The post-test performances were marginally not statistically different between FG and LG groups.

Conclusion:
Our results did not show any long-term benefit of a flipped classroom in terms of retention of knowledge as manifested by grades obtained in midterm and final examinations. It was also not received positively by the students.

Take-Away Message:
Flipped classroom mode of teaching although fancy does not seem to be superior to traditional teaching.

ABSTRACT ID:
ORF-TAL06

Innovations in Medical Education: Technology-Enhanced Role-Play for Case-Based Learning.

Mohammad Arshad Ikram[1]
[1]*IMU University, Malaysia*

Background:
Peer role-play (PRP) is a simulation-based teaching method where students actively engage in scenarios by assuming specific roles, proving powerful when integrated with technology. The IMU University introduced a virtual platform for clinical teaching to enrich student learning. Clinical cases are crafted using e-learning tools like Articulate Storyline 360 or Vyond, further enhanced by reconstructing case scenarios played out by peers.

Methods:
For orthopaedic teaching and learning purposes, three virtual clinical cases were devised, wherein students assumed the roles of both patients and clinicians, replicating clinical scenarios to facilitate experiential learning effectively. A comprehensive recording of each clinical case, supplemented with quizzes to enhance interactivity, is accessible to students via the IMU e-learning portal for Self-Directed Learning. The three clinical scenarios were designed to simulate typical orthopaedic emergencies: traumatic posterior dislocation of the hip, open fracture of the tibia, and acute compartment syndrome. After the exercise, students were tasked with completing a questionnaire aimed at evaluating their

attitudes toward the session and gathering feedback for further refinement of this role-play model.

Results

An online survey to acquire the perception of students for CBL through PRP was conducted. A total of 141 students participated in the survey. The questionnaire showed good internal consistency (Cronbach alpha = 0.932). 99.3% of students perceived PRP as a good tool to enhance clinical learning that helped them prepare for the real clinical environment. 95% of students appreciated the fact that they were able to revisit the case at their convenience.

Conclusion:

Peer role-play emerges as an effective virtual teaching method, providing positive learning experiences, insights into case-based learning, and fostering critical thinking. It empowers students through active participation, developing confidence in handling clinical situations, decision-making, and communication with patients and families.

Take-Away Message:

Peer role-play is an engaging and effective learning tool for case-based learning, providing opportunities for reflection and self-evaluation while enhancing students' communication, collaboration, and problem-solving skills.

ABSTRACT ID:

ORO-TAL03

Effectiveness & Students' Perception of Self-Directed Learning - A Poster Presentation Way, in Subject of Pharmacology at a Medical College in Western India.

Akanksha B Prajapati[1]

[1]*GCS Medical College, Hospital, and Research Centre, India*

Background:

Self-directed learning (SDL) has been suggested as a promising methodology for lifelong learning in medicine. The concept of SDL remains elusive, with students and educators finding difficulty in defining and agreeing on its worth.

Aim:

To evaluate the effectiveness and analyse perception of students' about SDL as a Teaching Learning(T/L) method.

Methods:

Total 73 out of 140 undergraduate phase II medical students participated in the self-directed learning session conducted by the Department of Pharmacology in Medical College Institute of Western India. Topic of SDL session was "Management of Myocardial Infarction(MI)." Students were instructed to prepare & present a poster in a group of minimum 2 or maximum 4 students per poster as per the schedule.

Primary Objective: To evaluate Effectiveness analysing the marks students had secured in case-based question in theory internal exam.

Secondary Objective: To analyse perception of students with the predesigned questionnaire in goggle form. Reflection of the students was also obtained and analysed.

Results

Primary Objective: Out of 73(100%) participants 53(72%) students attempted Case based question of 6 marks on MI; average score was 3.106 which was ?50% total marks.

Secondary Objective: Students' perception was analysed using Likert's Scale. 86.3% participants strongly agreed upon liking the activity and 84.9% participants agreed that it was a new way of learning and sharing. 71.2% and 78.1% participants agreed that it helped them in deciding their goals and served as a platform to express their thoughts respectively. 35.6% and 43.8% participants rated this session 5 and 4 respectively(1-poor, 5-best). 44% and 14% of Participants could express upto "Reasoning" and "Reconstruction" level respectively in reflection.

Conclusion:
SDL proves to be an effective T/L method. Students perceived; SDL provides a scope for research and critical thinking.

Take-Away Message:
Self Directed Learning (SDL) sessions should be more frequently arranged keeping feasibility and curriculum demand in mind. According to Students, it imparts the need of the research, confidence in public speaking, defining their own goals of learning and communication skills. It also helps in making the subject interesting. Involvement of students makes the teaching learning learner-centric which is the need of an hour. From faculty point of view; SDL involves the students in the process of Learning itself so it becomes easy to keep students attention and interest to the optimum. SDL provides holistic development of medical students. Thus, such sessions should be made popular among the students and faculties as well.

ABSTRACT ID:
ORO-TAL05

Imposter Phenomenon and Self-Reported Satisfaction Among Medical and Surgical Postgraduate Trainees in Sri Lanka.

Manudi Vidanapathirana[1], Deshan Gomez[1], Inoshi AtukOrala[2]
[1]National Hospital of Sri Lanka, Sri Lanka.
[2]University of Colombo, Sri Lanka

Background:
Large numbers of medical professionals experience burnout. Increased prevalence of imposter phenomenon, low work-related satisfaction and poor work-life balance are believed to collectively increase the risk of burnout amongst doctors. The present study aims to assess the prevalence, and examine the severity and factors associated with imposter phenomenon and self-reported satisfaction with training, in a cohort of postgraduate trainees in Sri Lanka.

Methods:
This cross-sectional study was conducted among medical and surgical postgraduate trainees enrolled at Post Graduate Institute of Medicine, University of Colombo. A self-administered questionnaire including the Clance Imposter Scale was used for data collection. SPSS version 26 was used for analysis, and associations were analysed using Chi Square and logistic regression.

Results
The response rate was 75.3% (n=201). The prevalence of imposter phenomenon was 34.8% (n=70) and the mean imposterism value was 55.55, in the category of moderate imposterism. Of the study population, 9% (n=18) experienced few imposter characteristics, 51.7% (n=104) experienced moderate imposter characteristics and 38.8% (n=78) experienced frequent imposter characteristics There were no significant sociodemographic, academic or work-related associations for imposterism. Self-reported satisfaction with postgraduate training was expressed by 79.1% (n=159) of trainees, with 59.2 % (n=119) self-reporting poor work-life balance. Self-reported satisfaction with training was associated with satisfaction with chosen specialty, self-reported satisfaction with academic performance, self-reported work-life balance, confidence in interpersonal interactions, financial stability and family support.

Conclusion:
A significant number of Sri Lankan medical and surgical postgraduate trainees experienced imposter phenomenon. This phenomenon may be attributable to innate personality factors present in this population. Self-reported trainee satisfaction with postgraduate training was high and associated with positive psychosocial factors.

Take-Away Message:
A significant number of Sri Lankan medical and surgical postgraduate trainees experienced imposter phenomenon, which may be

attributable to innate personality factors. Since imposter phenomenon contributes to physician burnout, medical educators need to facilitate conducive and safe learning environments for postgraduate trainees.

ABSTRACT ID:
ORF-TAL08

Effect of Language in Learning and Performing Clinical Skills Among Vision Technicians: English Versus Vernacular-based Rubrics for Assessment.

Sitaramanjaneyulu Madhukuri[1], Ruby Kala Prakasam[1], Ram Kumar DSV[1], Avinash Pathengay[1], Snigdha Snigdha[1]
[1]Standard Chartered - LVPEI Academy for Eye Care Edu, India

Background:
In professional and allied health courses, where English is the predominant academic language, language barriers can impede effective communication between teachers and students. This study explores how language influences the understanding and application of competency-based assessment rubrics (CBAs) among Vision Technician (VT) students in India. Specifically, it investigates the advantages of using vernacular language in improving students' learning outcomes.

Methods:
An electronic survey was conducted with 39 VT students during the first semester of the program at the L V Prasad Eye Institute, Hyderabad, India, in August 2023. Competency-based assessment rubrics were employed to evaluate clinical skills, focusing on visual acuity and objective refraction. Study purposes, rubrics for visual acuity were provided in English, and the rubrics for objective refraction were in Telugu. Clinical evaluations were conducted in the fifth month of their training period. Variables assessed included students' confidence in spoken language, language preference for learning and evaluation, difficulty in understanding rubrics, and perception of rubric usefulness.

Results
68% of students were highly confident in spoken Telugu compared to 13% in English. 56% preferred rubrics in both languages, believing that both would enhance their clinical performance, with 86% valuing rubrics for scoring high. Statistical analysis revealed significant differences in language preference and understanding difficulty. The Chi-square test showed significant differences in language preference ($p = 0.006$) and understanding difficulty ($p = 0.018$), with Telugu-medium students finding it easier to understand than their English-medium counterparts.

Conclusion:
Most students preferred CBAs in both Telugu and English, considering them beneficial for performance and scoring high.

Take-Away Message:
This study suggests the importance of incorporating vernacular language into assessment tools to facilitate better understanding and improve learning outcomes among diverse student populations.

ABSTRACT ID:
ORF-TAL09

The Effect of Faculty Training on Clinical Teaching Skills Enhancement.

Sara Shakil[1], Azam Afzal[1], Zainab Samad[1], Sana Saeed[1], Muhammad Tariq[1]
[1]Aga Khan University, Pakistan

Background:
Clinical Teaching is an essential, yet complex mode of multi-faceted instruction in health professions education. However, there are significant issues in various aspects of clinical teaching that hinder learning in the clinical environment. The aim of this study is to

identify and compare key dimensions of faculty perceptions regarding factors that affect clinical teaching in various inpatient and outpatient settings.

Methods:
A constructivist, inductive qualitative research approach and focus group discussions were used to explore perceptions of 51 faculty members in the Department of Medicine at Aga Khan University (AKU), in 2020-2021, regarding factors that affect clinical teaching. Inductive thematic content analysis of faculty opinions was used to identify and compare key dimension of their perceptions regarding factors that affect clinical teaching in various inpatient and outpatient settings.

Results
Five major themes, reflecting key viewpoints of faculty emerged from the qualitative data, namely; perceptions of clinical teaching, qualities of good clinical educator, expectation as a clinical teacher, barriers and challenges of clinical teaching and strategies to become an effective clinical teacher. There were considerable overlaps, but also meaningful interpretations in the perception of faculty, especially with respect to the challenges of and solutions to improve clinical teaching.

Conclusion:
Good clinical teaching is concerned with providing role models for good practice, making good practice visible and explaining it to learners. Every effort should be made to address and resolve issues in clinical teaching; one solution may be to apply various evidence-based clinical teaching models like OMP, SNAPPS etc.

Take-Away Message:
Keeping in view the issues in clinical teaching, this study will lay foundations for identifying efficiency of faculty of Department of Medicine in implementing different clinical teaching models in various workplace settings after training. It will pave way for modifying clinical teaching strategies and explore the degree of re-training required to restore decayed knowledge of best clinical teaching practices, resulting in better performance of faculty as clinical teachers.

ABSTRACT ID:
ORO-TAL06

What Did the Instructors Gain from The Training on Qualitative Feedback Through The "World Café"

Chia-Hung Chen[1], Li-Chen Chang[1], Yung-Chi Cheng[1], Yu-Hsuan Hou[1], Chao-Yu Hsu[1], Huei-Jung Ou[2]
[1]Chia-Yi Christian Hospital, Taiwan,
[2]Taitung Christian Hospital, Taiwan

Background:
We utilized the "World Café" method to provide training for instructors on delivering qualitative feedback. In this context, we aimed to elucidate the specific benefits and insights that the instructors derived from the training program.

Methods:
On September 13, 2023, we conducted a 'World Café' workshop that extended for a duration of two hours, with the enthusiastic and active involvement of all instructors. The workshop entailed the discussion of four videos, each with an approximate duration of 6 minutes. Following the workshop, a focus group interview was undertaken. The qualitative investigation was founded upon the scrutiny of observation records and verbatim transcripts from this interview.

Results
A total of 29 instructors attended the workshop, and nine willingly participated in interviews after the workshop. The interview lasted for a duration of 34 minutes. A qualitative study unveiled that following the training, instructors acquired the capacity to assess students' attitudes and guide trainees in think critically. Furthermore, they demonstrated an ability to foster equitable teaching relationships

and develop actionable plans in collaboration with students.

Conclusion:

Conclusion: Instructors gained the capability to assess students' attitudes, guide critical thinking, foster equitable teaching relationships, and collaboratively develop actionable plans with students. The "World Café" can be used as a pedagogical tool for instructing educators in the delivery of qualitative feedback.

Take-Away Message:

1. Instructors gained the capability to assess students' attitudes, guide critical thinking, foster equitable teaching relationships, and collaboratively develop actionable plans with students.
2. The "World Café" can be used as a pedagogical tool for instructing educators in the delivery of qualitative feedback.

ABSTRACT ID:

ORF-TAL10

A Goffman's Analysis of Learner Behaviour in the Clinical Learning Environment

Shalini Gupta[1], Cate Kennedy[1], Mandy Moffat[1], Stella Howden[2], Lindsey Pope[3]

[1]University of Dundee, United Kingdom,
[2]Heriott-Watt University, Scotland,
[3]Glasgow Medical School, Scotland

Background:

Clinical Teaching is an essential, yet complex mode of multi-faceted instruction in health professions education. However, there are significant issues in various aspects of clinical teaching that hinder learning in the clinical environment. The aim of this study is to identify and compare key dimensions of faculty perceptions regarding factors that affect clinical teaching in various inpatient and outpatient settings.

Methods:

A constructivist, inductive qualitative research approach and focus group discussions were used to explore perceptions of 51 faculty members in the Department of Medicine at Aga Khan University (AKU), in 2020-2021, regarding factors that affect clinical teaching. Inductive thematic content analysis of faculty opinions was used to identify and compare key dimension of their perceptions regarding factors that affect clinical teaching in various inpatient and outpatient settings.

Results

Five major themes, reflecting key viewpoints of faculty emerged from the qualitative data, namely; perceptions of clinical teaching, qualities of good clinical educator, expectation as a clinical teacher, barriers and challenges of clinical teaching and strategies to become an effective clinical teacher. There were considerable overlaps, but also meaningful interpretations in the perception of faculty, especially with respect to the challenges of and solutions to improve clinical teaching.

Conclusion:

Good clinical teaching is concerned with providing role models for good practice, making good practice visible and explaining it to learners. Every effort should be made to address and resolve issues in clinical teaching; one solution may be to apply various evidence-based clinical teaching models like OMP, SNAPPS etc.

Take-Away Message:

Keeping in view the issues in clinical teaching, this study will lay foundations for identifying efficiency of faculty of Department of Medicine in implementing different clinical teaching models in various workplace settings after training. It will pave way for modifying clinical teaching strategies and explore the degree of re-training required to restore decayed knowledge of best clinical teaching practices, resulting in better performance of faculty as clinical teachers.

ABSTRACT ID:
ORF-TAL11

Perceptions and Experiences of Concept Mapping Among Undergraduate Optometry Students: A Comparative Study

Ruby Kala Prakasam[2], Revathy Mani[1], Srikanth Maseedupalli[2], Vinod Maseedupally[1]
[1]*University of New South Wales, Australia,*
[2]*L V Prasad Eye Institute, India*

Background:
Optometry requires skilled professionals for quality eye care. Concept mapping (CM) is an active learning tool that fosters critical thinking, yet its use in optometry education is limited. We introduce CM to undergraduate optometry students at L V Prasad Eye Institute (LVPEI), India, and the University of New South Wales (UNSW), Sydney, aiming to capture their experiences and perceptions.

Methods:
Undergraduate optometry students from LVPEI (n=44) and UNSW (n=100) were invited to participate in a three-phase study. The pre-class phase included pre-reading materials, followed by an in-class activity where students were taught about building CMs in small groups. The final assessment involved individual CM construction on a given optometry topic. An online survey assessed students' perceptions.

Results
A total of 29 LVPEI and 36 UNSW students completed the survey. Initially, most LVPEI (86%) and UNSW (61%) students were unfamiliar with CM, but a higher percentage of UNSW students (39% vs. 14% at LVPEI, p=0.025) reported some familiarity. The majority of students from both LVPEI (61%) and UNSW (83%, p=0.25) related new information to previous knowledge, indicating that CM encouraged critical thinking (LVPEI 83% vs. UNSW 80%, p=0.82). Identifying concepts was notably challenging for LVPEI compared to UNSW students (93% vs. 42%, p<0.001), while linking concepts was somewhat challenging for both groups (LVPEI 58%, UNSW 57%, p=0.05). Moreover, a majority of LVPEI (86%) and UNSW (72%) students expressed a willingness to use CM in the future, with a positive overall experience reported by 83% at LVPEI and 98% at UNSW.

Conclusion:
Introducing concept mapping positively impacts optometry students' learning experiences and perceptions. Despite initial challenges, students at both LVPEI and UNSW showed a willingness to use CM in the future, indicating its potential as an effective learning strategy in optometry education.

Take-Away Message:
Introducing concept mapping positively impacts optometry students' learning experiences and perceptions, highlighting its potential as an effective learning strategy.

ABSTRACT ID:
ORF-TAL12

Emotional Intelligence and Resilience: A Need for Collaborative Healthcare

Afzal Fatima[1]
[1]*Ziauddin University, Pakistan*

Background:
Emotional intelligence (EI) and resilience are considered essential for self-well-being, decision making, problem solving and effective teamwork which makes them integral to safe patient care. Despite their importance there is limited understanding of these constructs in undergraduate clinical healthcare students and few studies have been done in Pakistan to quantify them. The objectives of the study were to compare the levels of emotional intelligence (EI) and resilience (Res) in study population, correlate their scores and identify factors that may affect EI and Res.

Methods:
In an analytical, cross-sectional study Sterrett's Emotional Quotient Self-Assessment Checklist and Brief Resilience Scale were used to assess EI and resilience in undergraduate clinical year students of medical, dental, rehabilitation sciences, and nursing colleges of a private university in Pakistan.

Results
The mean EI and resilience scores were 105.47 and 3.09 respectively. Females had a higher EI score than males, however, male students had high resilience scores than females. The mean EI score was higher in Dental and Nursing students while Medical and Dental students possess high mean resilience score. The Kruskal Wallis test showed a significant difference (p=.008) in mean resilience scores across Rehabilitation Sciences and Medical Colleges while no significant difference was found between the mean EI scores. There was a significant correlation between EI and resilience scores (p= .000). Linear regression analysis showed that age, gender, and personality traits do not predict EI and resilience scores.

Conclusion:
Majority of participants need to improve their EI skills, but their resilience score lies within normal range. The results of study can inform policies and practices aimed at promoting well-being in the healthcare professionals. As these skills can be learned and improved, courses to enhance these skills among students can be developed and implemented to improve patient outcomes in a collaborative healthcare system.

Take-Away Message:
In addition to cognitive skills, non-cognitive skills, specially Emotional intelligence leading to resilience are also important for better personal and professional life.

ABSTRACT ID:
ORF-TAL13

Preparing Tomorrow's Professionals: Evaluating the 'Get, Set, Go' Simulation Boot Camp for Pre internship students - A Qualitative Analysis

Aun Ali[1], Rabia Aftab[1]
[1]*Aga Khan University, Pakistan*

Introduction:
Many students graduate without competence in fundamental medical and surgical procedures. As these medical students transit from being students to interns, they experience inherent stress, which may result in adverse outcomes for both interns and patients. Simulation boot camps offer a promising avenue for enhancing the skills of medical students before they transition to internships. The primary objective of this study was to explore the effectiveness of a one-week simulation boot camp to prepare fresh medical students before internship.

Methodology:
After obtaining IRB (No. 074) from the Private medical institute, a weeklong simulated boot camp was introduced by Department of Surgery, and invitation was sent via social media. We decided to keep the sample size 30 so as to focus on individual students. On the last day students were asked to reflect and submit it on google form. A qualitative methodology was used to collect the data and thematic analysis was done.

Results
Five theme and twelve sub themes were identified from the content analysis of the reflections, namely hands on practice (practical work, patient safety, less anxiety), Conducive environment (cooperative facilitators, group activities), available resources (enough supplies, reading material, videos, colors chit) and confidence (personality, organized and experiential learning).

Conclusion:
The students reported a positive experience and satisfaction with learning from the boot camp. It succeeded in creating a safe learning environment for them and opportunities to hone their clinical assessment skills prior to their first clinical fieldwork placement.

Take-Away Message:
The Transition to Internship Bootcamp enhances students' preparedness for internship and their confidence in various surgical and medical skills. Positive response to hands-on skills lab experiences particularly highlights the importance of such training.

ABSTRACT ID:
ORF-TAL14

Integrating Blended Learning to Enhance Outcomes in Cell and Molecular Immunology: A Study at Newcastle University Medicine Malaysia.

Moe Kyaw Thu[1], Nadine Hayudini Nograles[1], Madihah Rushaidhi[1], Kye Mon Min Swe[1]
[1]Newcastle University Medicine Malaysia, Malaysia

Background:
Blended learning integrates online digital media with traditional classroom methods and is increasingly favored in biomedical sciences for enhancing learning experiences. This study examines the effects of a blended learning framework on exam performance and student satisfaction in the "Cell and Molecular Biology of the Immune System" module at NUMed.

Methods:
Employing an explanatory sequential mixed methods design, this research commenced with quantitative data collection involving 28 Stage 2 biomedical sciences students. Data included students' satisfaction ratings, measured using a Likert scale, and pre- and post-lecture evaluations for learning outcomes. This phase was followed by qualitative investigations through focus group discussions, aiming to deepen the interpretation of the quantitative findings.

Results
Quantitative analysis indicated high levels of satisfaction, with scores ranging from 4.61 to 4.83, especially regarding pre-lecture materials and lecture delivery. Additionally, the mean exam performance of students exposed to blended learning was higher than the average performance over the past five years, though the difference was not statistically significant. Despite these high ratings, statistical tests, including Analysis of Variance (ANOVA), revealed no significant differences in responses across gender or age groups. Qualitative feedback underscored the vital role of structured and interactive pre-lecture materials in promoting deeper engagement and understanding. Thematic analysis of focus group discussions highlighted these aspects vividly.

Conclusion:
The exploratory sequential mixed methods approach provided insightful revelations into how blended learning affects student engagement and satisfaction, potentially leading to enhanced academic performance. The findings support the ongoing integration of digital and traditional educational elements, affirming their effectiveness in improving student learning outcomes in biomedical education.

Take-Away Message:
Blended learning in biomedical education enhances student engagement and satisfaction, which may contribute to improved academic performance. Although no significant statistical difference was noted in exam performance compared to historical data, students' satisfaction and interactive engagement with the course materials were markedly high. These findings underscore the value of continuing to integrate digital resources with traditional classroom teaching to optimize learning outcomes in higher education.

ABSTRACT ID:
ORF-TAL16

Bridging the Gap: Transferring Laparoscopic Skills from Simulation to Real-world Practice by Training on Box Trainers.

Rabia Aftab[2], Syed Moyn Aly[1], Aun Ali[2]
[1]*Jinnah Sindh Medical University, Pakistan,*
[2]*Aga Khan University, Pakistan*

Background:
Lack of Basic Laparoscopic Training has been observed in the General Surgery residency program. Despite simulations being used in various institutions across Pakistan, it is not known whether the trainings being carried out have any impact on resident performance in the real setting. The objective of this study was to compare GOALS scores obtained in a) real life setting before simulation training, b) in simulation lab at the end of training, c) in real life after simulation training.

Methodology:
For this study, we opted for a quasi-experimental design. We offered a 3-month box trainer course to 52 surgical and allied residents. Prior to simulation training, we assessed their laparoscopic skills using the GOALS (Global Operative Assessment of Laparoscopic Skills) tool. Subsequently, after the training, we reassessed them using the same tool. Then, we evaluated these same students in the operating room while they were performing laparoscopic surgery on real patients. We applied ANOVA using SPSS to compare the results.

Results
The result showed significant difference indicating transfer of laparoscopic skills from simulation to real life setting.

Conclusion:
The implementation of a 3-month box trainer course led to measurable improvements in residents' laparoscopic abilities, as demonstrated by their performance in both simulated and actual surgical scenarios.

Take-Away Message:
Simulation-based training using box trainers is a valuable method for enhancing laparoscopic proficiency among surgical and allied residents. Such training programs can contribute significantly to the development of competent laparoscopic surgeons, ultimately benefiting patient care and surgical outcomes.

ABSTRACT ID:
ORF-TAL17

Integrating Visual Thinking Strategies with Photography to Increase the Awareness of Medical Students about the Health Problems of Indigenous Population due to Climate Change.

Krishna Mohan Surapaneni[1]
[1]*Panimalar Medical College Hospital & Research Institute, India.*

Background:
Climate change poses a significant threat to indigenous. However, current Medical Education practices do not sufficiently incorporate the health problems of indigenous community for students to effectively understand these issues. More than didactic lectures which results in less student engagement, photography, with its profound capacity to capture intricate details, convey stories and evoke emotions, serves as a powerful educational tool. This study aims to explore the effectiveness of photographic interventions in enhancing medical students' awareness of the health challenges faced by indigenous populations due to climate change.

Methods:
Forty medical students divided into 10 small groups of 4 each participated in this intervention. Each group was provided with 5 photographs that illustrated the health impacts of climate change on different indigenous

communities worldwide. Students engaged in visual thinking strategies to encourage detailed observation, critical thinking, and interpretation of the images followed by reflective discussion with facilitator. The effectiveness of the intervention was evaluated using pre-test and post-test assessments and focus group discussions to gauge students' learning experiences.

Results

Post-test scores revealed a highly significant improving in students' knowledge and awareness about health problems of indigenous communities due to climate change ($p<0.0001$). Qualitative data from focus group discussions highlighted an enhanced understanding and empathy among students. Many reported a newfound awareness of the intricate links between environmental changes and health disparities faced by indigenous communities. Additionally, students expressed a greater inclination towards integrating sustainable health practices into their future medical careers, reflecting a positive shift in attitudes.

Conclusion:

Photography in medical education effectively enhanced awareness and shifted student attitudes positively towards the health challenges faced by indigenous populations. This study demonstrates that incorporating visual arts into the curriculum can significantly impact students' understanding and empathy, encouraging them to consider broader socio-environmental factors in their future medical practices.

Take-Away Message:

The use of photography in medical education proved to be a highly effective medium for enhancing awareness and shifting attitudes among medical students towards the health challenges indigenous populations face due to climate change. Given the positive outcomes, it is recommended that medical education curricula broaden their scope to include more interactive and reflective learning experiences centered around global health issues, particularly those affecting vulnerable populations. This approach not only enriches students' educational experience but also prepares them to be more socially responsible healthcare professionals.

ABSTRACT ID:
ORO-TAL07

Embracing Doctors as Teachers: Evaluating the Outcomes of Participation of Final Year Medical Students as Near-Peer Teachers in the Student-led Near-Peer Teaching Programme.

Kevin Xuan Hong Tang[1], Koon Kee Teo[1], Kye Mon Min Swe[1]
[1]Newcastle University Medicine Malaysia, Malaysia

Background:

Every medical graduate is expected to fulfil the teaching responsibilities stated by the General Medical Council (GMC). It is beneficial to nurture both the motivation to teach and the necessary teaching skills early in the undergraduate program. This study investigates the outcomes of final-year medical students as near-peer teachers in a student-led near-peer teaching program and their fulfilment of the educational responsibilities stated by the GMC.

Methods:

A cross-sectional study was conducted among the NUMed year 5 medical students who participated in the Peer Teaching Program 2023/2024. A structured post-participation 6-point Likert scale questionnaire was distributed to the near-peer teachers to assess their perspectives on the level of skills enhancement, motivation, and career direction. Additionally, the Peer Tutor Assessment Instrument questionnaires were distributed to the near-peer students to evaluate the performance of the near-peer teachers in five different areas: responsibility and respect, information processing, communication, critical

analysis, and self-awareness.

Results

There were 28 near-peer teachers and 49 near-peer students participated in the study. The perspectives of near-peer teachers score the highest in skills (5.36± 0.53), followed by motivation (5.16± motivation) and career direction (4.79± 0.82). However, most near-peer teachers indicated that they would not consider teaching to be their future primary career path after experiencing this teaching experience (4.36±1.34). Generally, the near-peer teachers were highly evaluated by the near-peer students across all domains (5.06± 0.51), with a slightly lower score in providing a summary after the whole teaching session (4.90± 0.82).

Conclusion:

Overall, the near-peer teaching program had a positive impact on the final-year medical students in fulfilling the "Doctors as Teachers" responsibilities outlined by the GMC.

Take-Away Message:

The results in this study thus call for a more structured near-peer teaching program to be implemented in medical schools. A longitudinal study is recommended to establish the causal relationship between the near-peer teaching programs and the outcomes of participation for the near-peer teachers.

ABSTRACT ID:

ORF-TAL19

Student and Faculty Perception of Jigsaw Method of Teaching.

Sarala N.[1], Bhuvana K.[1], Arun Hebbar J N[1]
[1]*Sri Devaraj Urs Medical College, India*

Background:

Competency Based Medical Education was introduced in India in 2019.Literature has shown jigsaw method facilitates learning in form of interaction, better comprehension, improved communication and learning skills. This study was planned to assess perception of students and faculty regarding jigsaw method of teaching-learning.

Methods:

A questionnaire-based study, students willing to give feedback on google form, exposed to jigsaw method in II MBBS included. Ten practical exercises were conducted by jigsaw. Questionnaire was validated for reliability, Cronbach's alpha 0.89. The questions were 17 for students and 10(faculty) assessed using five-point Likert with two open ended questions.

Results

243 students and 10 faculty responded. 95% students expressed they were able to search responses for subtopic, group discussion made them learn better, were able to interact in expert group, gained in-depth knowledge.96% strongly agreed that it promoted self-directed learning(SDL).95% said communication improved and increased confidence. 93% felt sessions kept them active and could apply this knowledge during clinics. 97% agreed others' performance was reinforcement. 89% said playing role of a patient they could perceive how patients feel. 88% expressed feedback from peers helped them to learn extra points and learnt to give feedback. 94% expressed time was sufficient for preparation and sessions were enjoyable. 87% said this activity helped them remember dosage schedule and 90% suggested jigsaw for other topics. 90% faculty said jigsaw was motivating,100% said they should have in-depth knowledge to clarify doubts, 80% felt they could assess students and give timely feedback. 70% expressed there was competition between students, 60% said other students were keenly observing and faculty were only facilitators. 70-80% expressed they require more faculty and was time consuming.

Conclusion:

Majority expressed jigsaw created opportunity for exchanging ideas, active participation, improved communication, promoted SDL and could apply the content learnt.

Take-Away Message:
Digital escape rooms can be simple yet effective in enhancing medical students' understanding and confidence in a topic. Its digital application lends itself to an innovative, low-resource and environmental friendly method of education.

ABSTRACT ID:
ORF-TAL20

Investigating Impact of PBL Toward Student's Learning Strategy.

Amandha Boy Timor Randita[1], Bulan Kakanita Hermasari[1], Ida Nurwati[1], Dyonisa Nasirochmi Pakha[1], Ratih Dewi Yudhani[1]
[1]*Universitas Sebelas Maret, Indonesia*

Background:
Learning strategy was influenced by many factors, including how the student's perception about teaching, learning and assessment process, including learning environment. Thus, impacted to how the problem-based curriculum ruined to achieve competences.

Methods:
We aimed to explore the student's perception about teaching and learning, assessment drive learning, and faculty involvement through the education. Focused group discussion was done virtually with 15 students from 1st, 2nd, and 3rd year. Thematic analysis was used for qualitative analysis.

Results
There were four themes, student's perception of PBL, group dynamic, assessment drive learning and learning style. Student's felt that PBL gained their skill and knowledge acquisition. But, several learning methods need to modified, considering the student's learning style. Dynamic condition, including social life and psychological factors within student's PBL group discussion. The respondents said that the assessment in medical education drive strategic learning with various learning approaches. Most of them are superficial and strategical learner. PBL was continuously implemented era to era of young generation. The generation itself have unique view how the can learn and get the competences. This study showed teaching and learning should be consider and accommodate various student's learning style and strategy, or even stimulating students to involve in educational process.

Conclusion:
PBL have to taking up learning environment through current generation, including non-academic issues such as mental health, infrastructure, academic supporting materials, and their inner community that affected to competence accomplishments. However, assessment of learning is needed for assessment drive learning.

Take-Away Message:
We recommend to bringing up PBL method to further studies in developing curriculum. Not only involving the national regulation and faculty staff, but also the student life and well-being. How assessing the PBL processes also need to be explore, including how the PBL can really drive achievements of competences at current generation.

ABSTRACT ID:
ORF-TAL21

High or Low Fidelity 3D Anatomy: What Favours Students' Spatial Ability?

Vivek Perumal[1]
Lee Kong Chian School of Medicine, Singapore

Background:
Low-fidelity or Lo-Fi (simplified) medical illustrations and learning material have always been used in anatomy education and deemed successful. However, all anatomy models displayed in 3D apps are of high-fidelity or Hi-Fi (higher resemblance to real life structures). In this study, we evaluated how Lo-Fi 3D anatomy models could favour visuospatial understanding

in students with diverse spatial abilities.

Methods:
Lo-Fi 3D anatomy models were developed using Blender-3D software. They were constructed from basic 3D meshes and curves for easy development, visualisation and understanding yet demonstrated correct anatomical details, spatial relationship and standard colour scheme.

Study design:
Medical students were invited to use the tailor-made Lo-Fi models and compare their experience against Hi-Fi Anatomage table. Following this, students underwent a test for spatial ability (mental rotation) and knowledge retention, and a survey on cognitive load and user experience while studying.

Results
Fifty-one medical students with a mean spatial ability score of 80±2% participated. Most students appreciated that the Lo-Fi models were aesthetically good (82%), promoting user engagement (94%) and not demanding higher cognitive load (91%) while learning. There was no significant difference in student learning outcome between using Lo-Fi or Hi-Fi models (p=0.6); this was also independent of their spatial ability scores (p=0.2). Students agreed that the content presented in the low-fidelity models were right adequate (71%), customisable to their curriculum (77%) and is free of cost (71%). A smaller population commented on the limitations of the low-fidelity models that they are neither real-life material (26%) nor evaluated in exams (24%).±±±

Conclusion:
Tailor-made low-fidelity 3D anatomy models do not impart excess cognitive load on students with spatial ability and thus can be effectively used alongside routine teaching material in anatomy education.

Take-Away Message:
Low-fidelity 3D anatomy models are easy to develop, distribute and learn from. They do not exert excess cognitive load and thus benefit learners with diverse spatial ability.

ABSTRACT ID:
ORF-TAL22

ImaGen 1.0: The Real-time 3D Anatomy Image Generator

Bhoobalan Baskaran[1], Senthil Murugan Saravanan[2]
[1]*Madurai Medical College, India,*
[2]*Epam System Pvt Ltd, Bangalore, India*

Background:
Procuring high quality medical illustrations for anatomy teaching and evaluation involves several logistic issues. Copyrighted material can only be used with adequate permission; universities pay a hefty sum to subscribe textbooks and online material for this purpose. There is a strong need to develop a royalty-free 'image generator' to benefit anatomy educators in this regard.

Methods:
Resource development: We developed ImaGen 1.0, an interactive web application that generates user-defined anatomy illustrations in 3D. This incorporates a custom-made musculoskeletal model (created with Blender-3D software) in the background that is rendered in real-time using Three.js. The user can input the name of anatomical structure in the ImaGen textbox and can obtain its 3D illustration. Querying and retrieval of cross-referenced anatomical data (bones, joints, muscles and anatomical spaces) was done by SQL.
Study design: The weblink for ImaGen was shared with 10 anatomy educators across 5 countries who were asked to comment on the face (aesthetic appearance) and content (correctness) validity, fidelity (authenticity of details) and utility (how well it could be used in teaching) of the resource.

Results
All users appreciated the resource and agreed that it could be used effectively to generate subscription-free medical illustrations for their anatomy lectures. On average, the rating for face validity was 98±4.2%, and content validity was 84±8.4%. The fidelity and utility were 98±4.2% and 96±8.4% respectively. Some concerns were that the resource did not provide all content like different heads of muscles, or the individual nerve supply. For these reasons, the utility is limited in some courses like physiotherapy.

Conclusion:
ImaGen merges modern web development with advanced 3D rendering capabilities to generate anatomy illustrations in a simple, inexpensive and user-friendly way. A freely accessible weblink will be available to all interested anatomy educators.

Take-Away Message:
This is the first of the kind resource where the user can type the name of an anatomical structure and generate its image. Currently available for upper and lower limbs, this will soon be extended to full-body anatomy.

ABSTRACT ID:
ORF-TAL23

Optimizing Learning Outcomes: The Impact of Self-Directed Learning on First Semester Medical Students

Dzata Bahjah[1], A. Tenri Padad[1], Dara Ugi Aras[1], Ummu Kalzum Malik[1]
[1]*Universitas Muhammadiyah Makassar, Indonesia*

Background:
Self-Directed Learning (SDL) has been recognized as a pivotal approach in medical education, fostering autonomy and enhancing learning outcomes. Understanding its impact on first-semester medical students is crucial for curriculum development and student support strategies. This study investigates the influence of SDL on academic performance among first-semester medical students at Universitas Muhammadiyah (Unismuh) Makassar.

Methods:
This quantitative study involved 220 first-semester medical students at Unismuh Makassar. Data were collected using the Self-Directed Learning Readiness (SDLR) questionnaire, which assesses students' preparedness for SDL across various dimensions, including self-management, desire for learning, and self-control. The relationship between SDL readiness and academic performance was analyzed using the Chi-square test to determine the statistical significance of the findings.

Results
The Chi-square analysis revealed a highly significant relationship between SDL readiness and academic performance, with a p-value of 0.000. This indicates that students with higher SDL readiness scores tended to achieve better academic outcomes in their first semester.

Conclusion:
The findings of this study underscore the critical role of SDL readiness in enhancing the academic performance of first-semester medical students. The significant positive correlation between SDL and academic success suggests that fostering SDL skills may be beneficial in medical education. These results advocate for the integration of SDL-promoting strategies within the medical curriculum at Unismuh Makassar, potentially serving as a model for other medical schools aiming to improve student outcomes through enhanced learning autonomy. Future research could explore the long-term impact of SDL on medical students' academic trajectories and professional development.

Take-Away Message:
Self-Directed Learning (SDL) has been recognized as a pivotal approach in medical education, fostering autonomy and enhancing learning outcomes.

ABSTRACT ID:
ORO-TAL10

Comparing Traditional Didactic Lectures and Team-Based Learning (TBL) in First-Year Medical Education: An Evaluation of Student Performance

Arun Kumar Mohan[1], Thejaswini K O.[1], Vivek Veeraiah[1], Mahantha M.[1], Sumali Sharma[1]
[1]*Sri Siddhartha Academy of Higher Education, India*

Introduction:
Medical education often relies on didactic lectures, where students passively receive information. This traditional method is associated with lower engagement and limited opportunities for active learning. In contrast, Team-Based Learning (TBL) encourages active participation through small group activities that foster critical thinking and collaboration. Given the shift towards active learning to improve educational outcomes, this study investigates the impact of TBL versus traditional lectures on the performance of first-year medical students. By evaluating both methods, the research aims to provide insights into their effectiveness in enhancing student engagement, understanding, and knowledge retention in early medical education.

Methods:
At Sri Siddhartha Institute of Medical Sciences & Research Centre, Phase-I MBBS students were divided into two groups for a study on teaching methods. An informed consent from the participants and Institutional ethical clearance was obtained. Group 1 (n=54) attended a didactic lecture on endocrine disorders, assessed via pre-test, post-test, and After-discussion Examination (ADE). Group 2 (n=65) participated in Team-Based Learning (TBL), evaluated using the Individual Readiness Assurance Test (IRAT), Team Readiness Assurance Test (TRAT), and ADE for critical thinking.

Results
In the study, Group 1's didactic lecture results showed an increase from a 47% pre-test score to a 71% post-test score (p=0.000). Group 2's TBL outcomes were 59% on the IRAT, 74% on the TRAT (p=0.000), and 68% on the ADE, outperforming Group 1's 44% ADE score (p=0.000).

Conclusion:
Group 2 students, engaged in Team-Based Learning (TBL), achieved higher ADE scores on clinical and applied physiology questions compared to Group 1, who attended didactic lectures. TBL's emphasis on teamwork enhanced comprehension, leading to better performance on applied questions. Thus, TBL is a promising, learner-centred method that improves outcomes in medical education, particularly in applied physiology.

Take-Away Message:
Team based learning (TBL) offers a robust alternative to traditional lecture-based methods in medical education. Its learner-centered approach not only enhances engagement and active learning but also significantly improves students' ability to apply their knowledge in practical, clinical contexts. By fostering a collaborative and interactive learning environment, TBL prepares students more effectively for their future roles as healthcare professionals, particularly in complex and application-heavy subjects like applied physiology. Thus TBL could be considered as a promising, learner-centered method that improves outcomes in Competency based medical education (CBME) in India.

ABSTRACT ID:
ORF-TAL24

Designing the Future of One Health Education: Developing an Interdisciplinary One Health Module

Melvyn Quan[2], Heleen Roos[1], Sean Patrick[2]
[1]*University of Witwatersrand, South Africa*,
[2]*University of Pretoria, South Africa*

One Health, highlighting the interdependence of human, animal and environmental health, is gaining prominence in undergraduate medical education. This holistic approach addresses global health challenges, emphasising the need for transdisciplinary education, an area still underexplored in large student cohorts. The University of Pretoria, with the distinction of hosting South Africa's only veterinary school, has taken the lead in pioneering an inter-faculty One Health module.

The current curriculum review is a golden opportunity to enhance health education by developing an innovative One Health module. The previous module in Veterinary Science introduced One Health concepts but lacked comprehensive interdisciplinary integration. By incorporating a module that brings together medical and veterinary students for collaborative learning, the revised curriculum will not only improve education but also equip them with the necessary skills and knowledge to make a substantial impact in their future roles as healthcare professionals and significantly enhance their preparedness to tackle global health challenges.

An action research and action learning project initiated the development of a One Health module tailored for a cohort comprising 290 third-year medical students and 170 fifth-year veterinary students. The primary objective was to provide an opportunity for students from different disciplines to interact, enrich their educational journey and equip them with the necessary tools to navigate the complexities of a globalised healthcare landscape effectively. Spanning one week for four credits, the module was structured around the defined learning outcomes and integrated pioneering teaching methods, including World Cafés, virtual escape rooms, and the creation of digital artefacts. Exposure to systems thinking fostered innovative thinking and problem-solving. Group assignments deepened their understanding of One Health issues and promoted cooperation across disciplines.

Managing student expectations and emphasising the importance of interdisciplinary learning emerged as critical results. Achieving alignment between medical and veterinary students' curricula and assessment strategies proved essential for fostering an integrated learning environment. Learning outcomes were adjusted to reflect better One Health principles and the critical cross-field outcomes necessary for authentic healthcare scenarios.
The One Health module not only equips students with insights into the interconnected issues of human, animal, and environmental health but also primes them for collaborative, respectful work in different cultural settings, enhancing health outcomes. The module fosters a holistic perspective on health issues, a crucial skill for addressing complex global health challenges.

Developing an interdisciplinary One Health module is achievable for large student groups, requiring alignment of existing curricula and learning outcomes. By refocusing on One Health principles and fostering competencies for working in transdisciplinary environments, the module can effectively integrate into the curriculum. Key steps include aligning educational objectives, revising learning outcomes and tailoring assessments.
The One Health module at the University of Pretoria exemplifies the enrichment of health education through interdisciplinary collaboration, preparing students to tackle global health challenges with a holistic perspective. Its successful integration

highlights the effectiveness and necessity of such innovative approaches in fostering comprehensive, cross-disciplinary understanding and action.

Take-Away Message:
It is possible to develop and successfully run an interdisciplinary One Health module between faculties in a university.

ABSTRACT ID:
ORF-TAL25

A Forward-Looking Digital Technique in Pathology Training: Fostering Active Learning

Spoorthi Ravi Banavar[1], Prashanti Chippagiri[1], Khoo Suan Phaik[1]
[1]IMU University, Malaysia

Background:
Microscopes, though capable of high magnification, are limited by a small field of view. Viewing an entire tissue at high magnification is advantageous, yet traditional pathology training often involves static, single-field views, promoting passive learning. Pathology relies heavily on visual learning, and while training has shifted from optical microscopes to digital images, student engagement remains low due to the static and non-interactive nature of facilitator-provided images. Virtual microscopy with Whole Slide Images (WSI) has transformed education by offering seamless, high-resolution views of entire tissue sections. However, the high cost of slide scanners, essential for producing these images, limits their widespread adoption, particularly in developing and low-resource countries.

Methods:
In a novel approach, we explored the feasibility of using Adobe Photoshop as a substitute for expensive slide scanners. By running an image stitching algorithm, we created zero-cost WSIs for teaching pathology to dentistry students. This approach not only provided high-quality images but also fostered an active, student-centric learning environment. Students were divided into 5 groups and were then given these specifically created WSIs to work on, identifying the key pathological features independently. Each group was further instructed to create an innovative learning resource based on the virtual slide. After two weeks, each group shared their prepared resources and explained them to their peers. The study also incorporated student feedback to understand its efficacy further.

Results
The results were promising. The seamless images created using Adobe Photoshop maintained their quality and were highly appreciated by the students. This success highlights the potential of our approach. Conclusion- With time and a little effort, photomicrographs obtained from a basic camera-microscope setup can be easily stitched in Adobe Photoshop. The result is a WSI of practical quality, all at a zero cost, that can be used in dynamic pathology training.

Take-Away Message:
This novel, innovative technique was developed to generate a zero-cost Whole Slide Imaging system. This holds the potential to be particularly useful in low-resource countries and institutes. The developed method fosters active learning strategies compared to traditional, mundane, static image-based learning. Students' positive feedback proves that this method is more active, making them more curious, and they feel that it needs to be implemented in the undergraduate curriculum. Students of the current generation are digital natives, making them very relatable. Further, the students can access them on their cell phones, too.

ABSTRACT ID:
ORF-TAL26

Innovating Cardiopulmonary Resuscitation Education: Enhancing Practical Skills with Virtual Reality

Sow Chew Fei[1], Goh Lay Khim[1], Dendi Permadi[2], Malini Krishna[1], Jacintha Anita Aroksamy[1], Liau Jia Li[1], Dharshan Kumar Kumarasan[1]
[1]*IMU University, Malaysia*,
[2]*Multimedia University, Malaysia*

Background:
Virtual Reality (VR) uses 3D graphics and interactive devices to immerse users in virtual environments, enabling ""safe fails"" crucial for student learning and patient safety. Its popularity aligns with digital-native students' preferences. The Ministry of Health a mandates CPR competency for all healthcare personnel based on international guidelines.

Rationale:
Conventional CPR instruction with task trainer manikins focuses on technical skills but fails to represent realistic emergencies, leaving trainees unprepared. VR can simulate high-stress conditions, but existing VR CPR training software lacks technical precision. We created combination of VR immersive simulations and task trainers' haptic feedback, offering unlimited practice and enhancing comprehension and retention in realistic settings. Based on Kolb's constructivist and experiential learning theories, it encourages active exploration, reflection, conceptualization, and practical experience..

Methods:
The VR-CPR project was conceptualised based on CIPP framework, ensuring structured approach to assessing, implementing and evaluation educational programs.

Context (Goals):
Identified need for immersive CPR training to overcome conventional method limitations. A multidisciplinary team of medical professionals, software developers, IT technician and training instructors developed the VR-CPR program, aligning it with international CPR guidelines.

Input (Plans):
The strategy, stakeholders, funding, and research were considered. This included evaluating costs and upkeep of purchasing ready-made software versus developing a new prototype, addressing stakeholder concerns, securing support from university management, and legal considerations.

Process (Actions):
Prototype Development: The VR-CPR application includes introduction to VR training, a narrated tutorial on fundamental interactions, a step-by-step animated CPR module, and a realistic VR environment for situational analysis and feedback. The setup includes HTC-Vive headset, motion sensors, and Vive Tracker 3.0 handsets for gesture recognition and control.

Implementation: The VR-CPR program was integrated into curriculum. Due to limited VR-headsets, students uses after theory and manikin-based skill teaching and before competency assessments. Online booking system allowed flexible, self-directed learning, maximising hands-on practice opportunities outside regular classroom hours.

Feedback: Feedback gathered using a validated user experience questionnaire from 38 Semester 1 to 3 medical students. It measured Adaptation/Immersion, Involvement, Interface Quality, and Sensory Fidelity. Results showed generally positive experiences, with mean scores of 3.6 to 4.5 on a 6-point scale. Students reported good engagement, effective visual surveying, and minimal visual distractions, but noted room for improvement in physical interaction and control device adjustment.

Product (Outcome)/Result of Evaluation:
Focus group discussions conducted with two groups of six Semester 5 students and one group of six faculty members. Results showed students found VR-CPR beneficial for understanding and retention of CPR concepts

when used alongside conventional methods. Despite initial technical issues, VR's interactive and engaging nature was appreciated. Both students and faculty agreed that VR should complement, not replace, conventional training. Faculty supported integrating VR-CPR but noted challenges with technology and suggested additional faculty training.

Potential Educational Impact/Feasibility of Innovation/Conclusion:

Using CIPP framework, VR-CPR integrates immersive simulations with tactile feedback to enhance learning outcomes. Feedback is positive, but challenges like technical issues and faculty training need remain. Future research should compare VR with convention methods and address long-term retention.

Take-Away Message:

Integrating VR into CPR training enhances learning by combining immersive simulations with haptic feedback, addressing the limitations of conventional methods. This approach shows promise in improving CPR competency, with initial feedback indicating increased engagement and retention. However, ongoing refinement, technical improvements, and faculty training are essential for effective and sustainable integration into medical education curricular.

ABSTRACT ID:

ORF-TAL27

From Virtual to Reality— Boosting Seamless Transfer from Haptics to Real Life Patient Care Delivery

Seow Liang Lin[1], Kiran Rehman[1], Spoorthi Banavar[1]
[1]IMU University, Malaysia

Background:

In conventional dental education, students train on dental simulators with plastic teeth to perform various technical procedures. The haptics technologies based on force feedback have opened new approach in teaching pre-clinical skills, providing realistic visual and tactile sensations. The main gaps in above-mentioned learning pedagogy include

(i) lack of all-inclusive training on conventional simulators to prepare students when face with real patients,
(ii) practice modules on current haptics simulators are focusing on specific procedural skills, lacking in integration for comprehensive patient care.

Rationale of Innovation:

This project was initiated with the following objectives to address the learning gaps:

(i) To design virtual patient modules in haptics dental simulators to facilitate transition from pre-clinical to clinical patient treatment.
(ii) To assess effectiveness of the virtual patient modules on assisting students in transition from pre-clinical to clinical setting.

Methods:

Five virtual patients with 4 main learning modules were created on haptics dental simulators to provide realistic learning for the full workflow when students receive patients in clinical environment:

(i) Clinical examination to generate patient's dental record.
(ii) Special investigations and interpretation to arrive at clinical diagnosis.
(iii) Formulate treatment plan.
(iv) Execution of the planned treatment on the virtual patients.

Assessment modules for dental chartings, treatment plan and precision in drilling cavities were used to assess students' performance.

Results of Evaluation:

Eighty-two year one dental students were exposed to the virtual dental patient module to prepare them for clinical setting. 76% of students agree that the haptic simulation is more interesting for learning the tasks and the standardized feedback given by the haptic simulators help them to gauge their progress. Majority of the students appreciate the unlimited attempts provided by haptic

simulators to help them familiarize with the procedures and boost confidence when faced with real patients.

Potential Educational Impact:
The haptic simulators have potential benefits to facilitate acquisition of dental manual skills. This innovative project with virtual patients integrated learning skills from the start of seeing a patient till completion of treatment, empowering the students to self-learn as they progress from pre-clinical to clinical provision of patient care. The standardized feedback provided by the haptic simulators coupled with personalized feedback from supervisors play essential role in supporting seamless transition from pre-clinical to clinical setting.

Feasibility of Innovation:
Currently dental programmes are faced with two major challenges: (1) reduction of teaching staff, (2) increase in the number of students entering the programme. These two challenges require the implementation of new pedagogical approaches and diversification of learning styles to guarantee training quality. In this respect, the use of haptic simulators with the innovative virtual patient modules allows for personalized training. This innovation in dental education can make up for shortcomings of traditional teaching methods and reduce the teaching burden.

Conclusion:
This innovative project in creating virtual patients on haptics simulators has demonstrated a positive impact on acquisition of clinical skills and promote personalized learning. Students can learn at their own pace to equip themselves as they go along from simple to more complex patient cases.

Take-Away Message:
This innovation focus on closing the gap in the teaching and learning activities to aid students in transition from pre-clinical to clinical patient care. Students have the advantage to pace their learning as they progress from simple to complex cases, they can always go back to the virtual patients to ensure they have acquired the procedural skills prior to executing on real patients. This boost their confidence when face with their patients and help in building dentist-patient rapport

E-POSTER PRESENTATION ABSTRACTS

Curriculum Design

ABSTRACT ID:
EPO-CUD01

Perspectives of Medical Students on the Implementation of Sub-Internship Rotation in Year 5 Surgical Clerkship: Observational Study from a Private Medical College in Pakistan

Amber. S. Sultan[1], Nadeem. S. Siddiqui[1], Mohammad Annes[1], Sadaf Khan[1], Razi Uddin Biyabani[1], Muhammad Nazim[1]
[1]Aga Khan University Hospital, Pakistan

Background:
The majority of the undergraduate curricula inadequately prepare medical students for the intense experience of the first postgraduate year (2,3). Some of the essential competencies that are lacking in graduate students are inadequate training in the management of in-patient emergencies, the performance of essential skills, and breaking bad news. The existing medical curriculum fails to adequately prepare medical students for the demanding experience of surgical postgraduate training.

Aims:
This study aims to implement and explore the perspectives of medical students on the newly introduced Surgical Sub-internship (SI) rotation in year 5 Surgical Clerkship.

Settings and Design:
This cross-sectional study was conducted at The Aga Khan University Hospital, Pakistan.

Methods and Material:
A list of 10 essential skills was identified after discussions with experts for students to complete during their Surgical SI. A self-designed 5-point Likert scale-based questionnaire was used to explore students' perspectives regarding their one-week rotation. We included students from the class of 2022 and 2023 who completed the surgical SI rotation.

Statistical analysis used:
Data analysis was performed using SPSS version 28 through descriptive analysis and analytical analysis including t-test.

Results:
A total of 121 medical students from the class of 2022 (n=73,60%) and 2023 (n=48, 40%) participated in the study with a female-to-male ratio of 53 (44%):68 (56%). Students generally expressed positive attitudes toward the SI rotation. However, they also identified areas for improvement which included effective communication of rotation objectives, a conducive learning environment, patient volume, standardized teaching, operating room exposure, student assignment to interns, resident involvement in teaching, and awareness of the stakeholders.

Conclusion
Medical students provided positive perceptions regarding the surgical SI rotation. However, the identified areas of improvement should be integrated to enhance its overall effectiveness.

Takeaway Message:
In conclusion, this study explored the perspectives of medical students towards Surgical SI rotation, demonstrating positive feedback from students. While integrating areas for improvement, the overall positive experience suggests the potential effectiveness of this innovative clinical one-week rotation which provided an opportunity for the students to work as Sub Intern. Future studies are recommended to assess the impact of surgical SI implementation in medical school on the clinical performance of postgraduate surgical residents.

ABSTRACT ID:
EPF-CUD01

Developing an EPA-based course module for EPA 6: Provide an Oral Presentation of a Clinical Encounter at Hue University of Medicine and Pharmacy, Vietnam

Nguyen Hoang Minh[1], Park Yon Chul[2]
[1]Hue University of Medicine and Pharmacy, Vietnam, [2]Yonsei University Wonju College of Medicine, Korea

Background:
In response to the Vietnamese Ministry of Health's initiative to standardize undergraduate medical education (UME) competencies, Hue University of Medicine and Pharmacy (Hue UMP) has embraced competency-based education (CBE) and adopted the Entrustable Professional Activities (EPAs) framework. This study aimed to develop an EPA-based course module for EPA 6 of the American Association of Medical College (AAMC), focusing on Oral presentation skills tailored to the context of Hue UMP.

Objectives:
This study aims to develop an EPA-based course module for EPA 6 of American Association of Medical College (AAMC), which focuses on providing an Oral presentation of a clinical encounter, tailored to the context of Hue UMP. The development process is guided by the ADDIE model.

Methods:
The ADDIE model guided the development process, involves five key steps: analysis, design, development, implementation, and evaluation.

Results:
The development process, guided by the ADDIE model, comprised analysis, design, development, implementation, and evaluation phases. Analysis involved assessing curriculum, learners, and resources, with second-year medical students identified as the target audience. The course module, situated in the Skills-lab Center, aligned core competencies from AAMC EPA 6 with standard outcomes of Hue UMP. Design and development phases ensured alignment of cognitive, psychomotor, and affective outcomes. Team-based learning (TBL) was selected as the educational method, fostering engagement through dynamic learning experiences, with readiness assurance tests (RATs) for assessment. Implementation involves faculty development materials disseminated via the Hue UMP learning management system. Evaluation will be conducted through Objective Structured Clinical Examination (OSCE) to assess efficacy and impact on student learning.

Conclusion
This proactive approach aligns Hue UMP with international standards, aiming to enhance clinical presentation skills and ultimately improve healthcare delivery in Vietnam.

Takeaway Message:
Evolution of Medical Education: The paragraph highlights the transition of medical education in Vietnam towards competency-based education, initiated by the Ministry of Health in 2015.

Adoption of International Standards:
Implementing the Entrustable Professional Activities (EPAs) framework at Hue University of Medicine and Pharmacy aligns with international standards, particularly those set by the American Association of Medical Colleges (AAMC).

Focused Course Development:
The study aims to develop a course module specifically tailored to EPA 6, which involves providing Oral presentations of clinical encounters, indicating a targeted approach to improving specific skills within medical education.

Guided Development Process:
The development process of the course module follows the ADDIE model, emphasizing systematic analysis, design, development, implementation, and evaluation.

Student-Centric Approach:
The curriculum is designed with a clear focus on second-year medical students, considering their progression and readiness for clinical clerkships.

Innovative Teaching Methods:
Team-based learning (TBL) is chosen as the educational method due to its ability to engage students and promote interactive learning experiences.

Comprehensive Assessment:
The course module's effectiveness is assessed through Objective Structured Clinical Examination (OSCE), ensuring a thorough evaluation of student learning outcomes.

Proactive Response to Change:
The development of the EPA-based course module demonstrates a proactive approach to adapting to changes in medical education, aiming to enhance student skills and contribute to healthcare improvement in the region.

Digital Health

ABSTRACT ID:
EPO-DHE01

Are Smartphone Users Smart Enough? Smartphone Usage and Associated Behaviours Among Medical Students

Noor-i Kiran Naeem[1], Zil-e-Fatima Naeem[1], Asfandyar Anwar[1]
[1]*Services Hospital, Pakistan*

Background:
The proliferation of smartphones, facilitated by easy internet access, has led to a surge in device usage across various demographics, including medical students. Understanding the patterns and potential implications of this trend is critical in ensuring it supports rather than hinders educational outcomes.

Objective:
This study aimed to assess the frequency and nature of smartphone usage among medical students at ABWA Medical College, Pakistan, identifying behaviours that may indicate problematic use.

Methods:
A cross-sectional survey was conducted over six months, following approval from the institutional IRB. Using purposive sampling, 270 undergraduate medical students across all five MBBS years were invited to complete the validated Smartphone Addiction Survey (SAS) through an online Google form. Data analysis was performed using SPSS version 25.0.

Results:
Of the invited participants, 264 (97.7% response rate) completed the survey. The primary uses of smartphones were for information storage, communication, education, and entertainment, with no significant gender differences in usage patterns. Key behaviours associated with smartphone usage identified were daily life disturbance, overuse, withdrawal, cyberspace-oriented relations, and tolerance. Statistically significant differences were observed in cyberspace-oriented relations, while the null hypothesis was retained for daily life disturbance, overuse, withdrawal, and tolerance.

Conclusion
The findings reveal significant insights into the smartphone usage behaviours of medical students at ABWA Medical College, highlighting the need for strategies to mitigate problematic usage patterns. The study underscores the importance of fostering healthy digital habits to enhance educational experiences in the medical field.

Takeaway Message:
While smartphones are integral to students' daily lives, serving various needs from communication to education, they also introduce behaviours that may disrupt daily life. The study underscores the importance

of understanding and mitigating potentially negative behaviours associated with smartphone overuse, such as cyberspace-oriented relations, to foster healthier digital habits and enhance the educational experience in the digital age. It calls for targeted interventions to promote balanced and mindful smartphone use among medical students.

Faculty Development

ABSTRACT ID:
EPO-FAD01

Enhancing Clinical Faculty Understanding of Clinical Competency Committees Through Simulation Cases

Yung-Chi Cheng[1], Chia-Hung Chen[1], Chao-Yu Hsu[1]
[1]*Chia-Yi Christian Hospital, Taiwan*

Background:
Some clinical faculty members lack a comprehensive understanding of the operations of Clinical Competency Committees (CCC). We aim to enhance this understanding through simulation case training.

Methods:
The training starts with an introduction to the functioning of the CCC. This is followed by two experienced educators conducting simulation cases to familiarize faculty with the operations of the CCC. After completing the simulation training, another senior educator invites participants for interviews. Those who agree participate in a focus group interview. The transcripts from these interviews undergo qualitative analysis.

Results:
Six clinical faculty members from the division of respiratory therapy participated in the training, all of whom agreed to the interviews. The interview lasted about 30 minutes. The qualitative analysis revealed that many participants were initially unaware of the existence and functions of the CCC. The simulation cases clarified the operations and structure of the CCC, illustrating the interactions between different roles. The training helped participants understand specific responsibilities within the CCC, including those of the program directors, clinical faculty, and external personnel.

Conclusion
The results indicate that simulation case training significantly enhances participants' understanding of the clinical competency evaluation process. Before implementing CCC operations, simulation case training might be a necessary step to ensure all faculty members are adequately prepared.

Takeaway Message:
1. Simulation case training significantly enhances participants' understanding of the clinical competency evaluation process.
2. Before implementing CCC operations, simulation case training might be a necessary step to ensure all faculty members are adequately prepared.

Governance and Leadership

ABSTRACT ID:
EPO-GAL01

Fostering Future Healthcare Leaders: An Interventional Study on Internal Medicine Residents

Iffat Khanum[1], Shazia Babar[1], Muhad Traiq[1], Syed Ahsan[1], Muhd Shahid Khan[1]
[1]*Aga Khan University Hospital, Pakistan*

Background:
Physicians emerge as healthcare leaders without prior formal training, showcasing their proficiency in diverse leadership positions.

We, therefore, planned to improve resident's leadership skills via the implementation of leadership workshops.

Methods:
A mix method study was conducted at the Department of Medicine, Aga Khan University Hospital, Pakistan. The needs assessment survey was followed by interactive workshops for year 3 and 4 IM residents. Leadership domains were derived from Sitkin-Lind's Six Domains of Leadership. The training effectiveness was evaluated on three of the four levels of the Kirkpatrick evaluation model. Three focus group discussions were also conducted with residents, faculty and nurses 3 months after workshops to explore perceptions regarding the change in residents' leadership behaviour

Results:
A total of 28 residents participated in leadership workshops with a mean age of 29 (±2) years and the majority were female (71.4%). Level 1 Kirkpatrick evaluation, 92.9% of residents expressed satisfaction with the workshop, 89% found activities interactive, workshop content relevant with well-defined objectives. Residents, in level-2, acquired knowledge (89.3%), intended to advocate for workshops (92.9%), felt confident in applying learning to work, recognized leadership importance (85.7%), and felt better prepared for challenges (92.9%). Level 3 assessment after three months revealed notable improvements in residents' perception of their leadership skills post workshops (p-value 0.003). The thematic analysis reflected a shared understanding among residents, faculty, and nurses regarding the significance of residents' leadership skills training with the consensus that ongoing training, mentorship, professionalism, team dynamics and communication skills are vital to preparing medicine residents for leadership roles in the clinical setting.

Conclusion
The research underscores the significance of leadership development for residents, and continuous engagement in similar programs to foster their leadership skills and competencies over time.

Takeaway Message:
Extending leadership development training to a wide range of postgraduate programs within and outside AKUH can significantly contribute to the development of future physician leaders. Leadership training should be included at undergraduate level of future physicians.

ABSTRACT ID:
EPO-GAL02

Exploring the Effectiveness of the "World Café" in Enhancing Leadership Skills Among Clinical Teachers

Yu-Fang Chung[1], Yung-Chi Cheng[1], Chia-Hung Chen[1], Chao-Yu Hsu[1], Xing-Mei Wang[2], Chien-Yi Ma[2]
[1]Ditmanson Medical Foundation Chia-Yi Christian Hospital, Taiwan,
[2]Taitung Christian Hospital, Taiwan

Background:
Enhancing leadership capabilities in the educational sector presents a significant challenge. This study adopts the innovative World Café model combined with video-based learning to train clinical teachers, aiming to examine how this approach can improve their leadership skills.

Methods:
The study was structured as a workshop where participating teachers were divided into four groups. Each group utilized a short video related to leadership skills as a learning tool, followed by group discussions to share insights. This facilitated an open exchange of ideas, enhancing the depth of understanding. The effectiveness of the training was evaluated

through qualitative analysis of interviews conducted post-training.

Results:
Eleven clinical teachers participated in the interviews. The qualitative analysis indicated that the training effectively enhanced their leadership capabilities, particularly in fostering teamwork and innovative thinking. Teachers reported that the interactive and visual learning approach enabled a better understanding and practical application of leadership theories.

Conclusion
The findings suggest that the World Café model, integrated with video-based learning, is an effective strategy for enhancing leadership skills in teachers. This method not only improves individual leadership techniques but also strengthens team collaboration and innovative capacities. It is recommended that this training model be applied more broadly in educational training programs to develop more effective leaders.

Takeaway Message:
1. World Café model, integrated with video-based learning, is an effective strategy for enhancing leadership skills in teachers. This method not only improves individual leadership techniques but also strengthens team collaboration and innovative capacities.
2. It is recommended that this training model be applied more broadly in educational training programs to develop more effective leaders.

Student Assessment

ABSTRACT ID:
EPF-SAS01

Resilience and Academic Performance: Exploring the Link in Dental Students

Fizzah Ali[1], Rehan Ahmed Khan[2], Mehwish Arooj[3]
[1]Lahore Medical and Dental College, Pakistan,
[2]Riphah International University, Pakistan,
[3]University of Lahore, Pakistan

Background:
This study aims to assess the correlation between the resilience level of dental students (preclinical and clinical years) and its effects on their academic performance.

Methods:
It is a correlational research study that was carried out on second, third, and final-year dental students at Lahore Medical & Dental College, Lahore. Academic resilience was judged by using the academic resilience scale (ARS-30). The correlation between resilience and academic performance was established by applying the bivariate Pearson correlation.

Results:
The mean age of the students was 21.49±1.39 years. Among 196 dental students from different years, 132(67.35%) were females and 64(32.65%) were males. A strong positive correlation was observed between the academic performance and resilience of dental students, i.e. r=0.774.

Conclusion
From the results, it can be concluded that there is a positive correlation between academic resilience and academic performance among dental students.

Takeaway Message:
Academic resilience places the construct of resilience in an educational context and

indicates a higher probability of achieving educational success even in the face of adversity. The study points to the significance that consists of interventions that promote resilience, modifying support programmes, updating the curriculum, improving faculty development, and implementing a comprehensive strategy for student support in health professions education. Educational institutions may develop a learning environment that encourages resilience and enables dentistry students to succeed academically and professionally by putting these implications into practice.

ABSTRACT ID:
EPF-SAS02

Blooms Taxonomy as an Assessment Tool in Ophthalmology Fellowship

Kavya M Bejjanki[1], Avinash Pathengay[1]
[1]*L V Prasad Eye Hospital, India*

Background:
This study addresses the imperative need for alignment between teaching strategies and assessment methods, with a specific focus on enhancing the cognitive skills.

Methods:
The investigation unfolds in two major phases: an assessment utilizing Bloom's Taxonomy and a subsequent feedback questionnaire. In the assessment, 171 students engaged with lower and higher-order questions, revealing a significant alignment between instructional objectives and evaluation processes. The feedback questionnaire further enriched our understanding, highlighting student preferences, challenges, and the perceived effectiveness of Bloom's Taxonomy.

Results:
Results indicate a positive belief in cognitive enhancement, with valuable insights into rate-limiting factors and areas for improvement.

Conclusion
The study contributes to the ongoing discourse on refining educational practices, emphasizing the importance of congruence between teaching and assessment for fostering critical thinking and problem-solving skills.

Takeaway Message:
The study elucidates the effective alignment between teaching strategies and assessment methods, particularly within the framework of Bloom's Taxonomy. The detailed exploration of students' cognitive engagement through Bloom's Taxonomy, coupled with qualitative insights from the feedback questionnaire in our study, extended beyond a mere evaluation of cognitive skills and yielded a holistic perspective. We not only assessed the 'what' of their cognitive abilities but also delved into the 'how' and 'why' uncovering their preferences, attitudes, and challenges in the learning process. This comprehensive approach is instrumental in informing pedagogical decisions, refining instructional strategies, and tailoring educational experiences to better align with the diverse needs and perceptions of Ophthalmology fellows.

ABSTRACT ID:
EPF-SAS03

The Effectiveness and Validity of Using Generative AI and Large Language Models (LLM) in Drafting High-quality Summative MCQs in the Cardiology Discipline

Michael Siu Hong Wan[1], Hui Yin Wan[2]
[1]*The University of Notre Dame, Australia,*
[2]*Blacktown Hospital, Australia*

Background:
Generative AI and Large Language Models (LLMs) are being utilised by many industries with medical education being no exception. They can assist in producing innovative content, generating meaningful texts, images and even coding. LLMs constitute a specific category of

AI models with a specialised focus on text-based data. Studies on the efficacy of using LLMs in generating high-quality MCQs in Cardiology for summative assessment of medical students are lacking.

Methods:
The authors selected 2 core cardiology topics and created detailed prompts for 3 LLMs (ChatGPT 3.5, Bing Co-pilot and Perplexity Pro) to generate 5-option, single best answer MCQs. 'ST elevation myocardial infarction (STEMI)' and 'arrhythmia' were chosen and each LLM was prompted to generate 15 clinical scenario-based MCQs (on diagnosis, investigations, management) with explanations for correct/incorrect options. A cardiologist and a PGY1 (Intern) were asked to review these MCQs for quality/accuracy and categorised them into: (1) acceptable, (2) requiring minor editing, (3) requiring major revision and (4) unusable/critical error in reasoning.

Results:
Fifteen MCQs related to STEMI and 15 MCQs related to arrhythmia were generated by each LLM giving a total of 90 MCQs. The Intern's categorisation was consistent with the cardiologist. ChatGPT had 60.0%, Co-pilot 63.3% and Perplexity 96.7% of Category 1 & 2 items. ChatGPT had 40.0%, Co-pilot 36.7% and Perplexity 3.3% of Category 3 & 4 items.

Conclusion
With detailed and specific prompts, the LLMs were able to generate effective MCQs with varying degrees of modification required. There were occasional significant errors generated by some LLMs. Perplexity Pro appeared to be the most accurate LLM. Limitations of this study: 90 MCQs from 2 common cardiology topics were generated and reviewed by 2 clinicians. More questions in other medical specialties could be explored in future research.

Takeaway Message:
With clear and detailed prompts, LLMs could become an indispensable tool in generating MCQs for assessment in Cardiology. Perplexity Pro appears to be more accurate than the freely available platforms. All generated MCQs require a content expert to review before implementation. LLMs are ever evolving with improving technologies and their efficacy and accuracy may continue to improve in the near future. Further studies in using LLMs to generate high-quality assessment items in other disciplines would provide more insight into the effectiveness of these tools in assessing medical students.

ABSTRACT ID:
EPF-SAS05

Peer Observation and Learning in Formative Clinical Assessment

Weeming Lau[1]
[1]*Monash University, Malaysia*

Background:
Assessment for Progression Examination (APEx) is a new clinical skills assessment in Monash University undergraduate medicine programme. It is conducted 3 times annually for second year medical students. A pilot preparatory APex session that incorporated students from different tutorial groups coming together and assessed by one examiner was conducted. We were keen to know whether this could resolve students' concerns with the minor differences in examination techniques that arise in the weekly tutorial sessions.

Research question:
Can involvement of inter-group students enhance the "learn from each other" and "accept it is ok to be different" in a formative clinical skills exam?

Methods:
126 students were invited to participate in the activity. They were divided into 7 groups and examined by one examiner. Each group consisted of 9 students. Each student performed a 15-minute task that involved physical examination on a SP. This was followed

by provision of immediate verbal feedback from both SP and examiner. This process was observed by all their peers. An anonymous online survey seeking feedback from students, examiners and SPs was obtained at the completion of the exam.

Results:
75 (60%) students gave feedback. 55% found difficulty with the task while 50% self-rated their performance "satisfactory". 67% preferred learning by observing their peers (beneficial) whereas 25% indicated a private session (nervous, stressful, time-consuming). 92% found the session useful as they had a better understanding of the different examination techniques. 5% felt uncomfortable being observed by their peers. 96% indicated the session promoted effective learning.

Conclusion
Peer observation using this formative APEx approach enhanced learning in most students.

Takeaway Message:
Utilitarianism in formative assessment is a good approach to enhance peer learning and acceptance of differences in examination techniques in clinical skills.

Teaching and Learning

ABSTRACT ID:
EPF-TAL01

Effect of the AO Faculty Education Program on Participants' Perception of Teaching Competencies

Woei Yun Siow[1]
[1]*Raffles Hospital, Singapore*

Background:
To deliver quality education to Orthopaedics surgeons worldwide, the AO Foundation initiated the Faculty Education Program (FEP) to elevate and standardize the teaching quality of its faculty. We evaluated the effect of the AO FEP on participants' perception of teaching competencies.

Methods:
The FEP course runs over six weeks. It includes five weeks of online learning beginning with a self-assessment, one and a half days of hands-on teaching practice and then one week of online follow-up, which includes a post-course self-assessment. The intended learning outcomes of the FEP include: prepare and present a lecture, moderate a small group discussion, instruct in practical exercises, motivate learners, encourage interaction, receive and give feedback, evaluate and improve one's own teaching, work with outcomes in teaching strategies, set reasonable expectations of a teaching or learning activity, use information about learners e.g. learners' needs and cultural context in the educational process and manage time and logistics. We evaluated the pre- and post-course needs analysis data gathered from the participants. Data from a convenience sampling of 98 graduates (with 89% response rate) from six FEP courses conducted from 2017 to 2023 was analysed.

Results:
The needs gap was narrowed in the following competencies: prepare and present a lecture, moderate a small group discussion, motivate learners, encourage interaction, evaluate and improve one's own teaching, work with outcomes in teaching strategies, set reasonable expectations of a teaching or learning activity, use information about learners and manage time and logistics. The gap reduction was largest in the following competencies: encourage interaction and work with outcomes in teaching strategies. The needs gap was unchanged for the following competency: instruct in practical exercises. The needs gap was widened for the following competency: receive and give feedback.

Conclusion
The FEP meets most of the teaching needs of the AO faculty.

Takeaway Message:
We conclude that the FEP is useful in meeting the majority of teaching needs of the AO faculty. Continued improvements will be useful in increasing the impact and maintaining the relevance of the AO Faculty Education Program.

ABSTRACT ID:
EPF-TAL02

Exploring The International Medical University Chiropractic First Semester Students' Cognitive Load in Learning Musculoskeletal Anatomy Topics

Sofiah Hanis Ahmad Hisham[1], Ho Chun Kit[1], Nur Atiqah Sa'hari[2], Siti Nurma Hanim Hadie @ Haji[3]
[1]IMU University, Malaysia,
[2]Universiti Sultan Zainal Abidin, Malaysia,
[3]Universiti Sains Malaysia, Malaysia

For a chiropractor, anatomy is a fundamental component to understanding the body structures to form a diagnosis and the focus is musculoskeletal anatomy (MSK). This study objectives were: 1. To measure the cognitive load score of musculoskeletal anatomy topics in Semester 1 International Medical University Chiropractic undergraduate students by using the Cognitive Load Scale. 2. To explore Semester 1 International Medical University Chiropractic undergraduate students' perceptions of cognitive load while learning musculoskeletal anatomy topic. 3. To explore the Semester 1 International Medical University Chiropractic undergraduate students' suggestions for learning musculoskeletal anatomy topics. A mixed-method cross-sectional study using 13-item Cognitive Load scale by Jimmie Leppink (2013) was conducted to measure the Semester 1 Chiropractic International Medical University students' cognitive load. The cognitive load scale data was analysed descriptively, while qualitative data were grouped into categories and subcategories. Result showed that Muscles of the Foot and Foot Mechanics, Nerves of the Lower Limb and Blood Vessels and Lymphatic Drainage of the Lower Limb have a higher intrinsic load. Topics with higher intrinsic load also show lower germane load. Exploration of the mental effort when students learn lower limb musculoskeletal anatomy shows that the majority required high effort. Lastly, students suggested providing more work examples, increasing executive function that suits learning style, and to improving instructional strategies. In conclusion, topics that introduce new concepts or contain many intricate structures that extend from one region to another like blood vessels and nerves show high intrinsic load. Meanwhile, topics that have been introduced in prior lectures show lower intrinsic load. Topics that show higher intrinsic load are shown to generate lower germane load.

Takeaway Message:
Identifying MSK topics that have high intrinsic load can prompt lecturers to properly plan the lecture delivery by minimising extraneous load to enhance the students' germane load.

ABSTRACT ID:
EPO-TAL01

Evaluating a Pilot of Paid "Medical Student Assistants" Working Out of Hours Shifts in Teaching Hospitals to Assist Junior Doctors

Callum McIntyre[1], Hilary Brewer[2], Andrea Clegg[2], Ayan Banerjea[2]
[1]University of Nottingham, England,
[2]Nottingham University Hospitals, England

Reduced clinical contact hours for medical students post-COVID resulted in students finding challenges integrating themselves into

clinical teams and gaining experience working on wards. NHS winter pressures and staffing levels led to an increase in demand on doctors. There are more task-based jobs to perform during a shift. At Nottingham Universities Hospitals Trust, we ran a small pilot scheme recruiting senior medical students from our affiliated medical school, the University of Nottingham. Students were invited to sign up for paid shifts on weeknights 17:00-21:00 and weekends 09:00-13:00 and 13:00-17:00 over the pilot study period. The aim was to increase their exposure and confidence working in clinical teams and help junior doctors on out of hours shifts by assisting with jobs that they are competent to perform. 8 clinical year medical students were recruited to "NHS professionals" as non-medical bank staff and were paid at "Band 4" hourly rate for a total of 26 shifts. Qualitative and quantitative feedback was collected from students pre-trial, mid-trial and post-trial. Feedback was collected from the junior doctors and ward leaders that supervised the students. Students scored their confidence in performing ward tasks from 1-10 before and after the pilot. Average global ward confidence increased by 1.3 with clinical skills increasing by 1.5, IT use by 1.4, staff interaction by 0.9, patient interaction by 0.5 and using the ward phone by 1.1. Junior doctors scored how useful student assistants were on a scale of 1-10. Clinical skills: 9, seeing patients/documenting: 7, booking requests: 6.3, contributing to TTOs: 7.3, communicating with other staff: 6.7. Qualitative feedback demonstrated that doctors found students helpful by performing jobs such as updating blood results and performing clinical tasks, allowing doctors to perform crucial tasks

Takeaway Message:
Medical students assisting junior doctors on out of hours shifts in a paid capacity has increased medical student confidence working in the clinical environment and has given junior doctors more time to perform crucial out of hours tasks, supporting hospital out of hours services. There is scope to grow this project by conducting further pilots and collecting data across the trust and being able to recruit from all medical schools.

ABSTRACT ID:
EPF-TAL16

Transforming Health Education: Interprofessional Team-Based Learning among Health Professional Students

Mohammad Arshad Ikram[1], Aida Lina[1]
[1]IMU University, Malaysia

Background:
Health education is vital for public health, improving well-being, reducing healthcare costs, and promoting equity. Interprofessional team-based learning fosters teamwork and trust among healthcare students and professionals to deliver quality care. Little Flower Learning Centre (LFLC) in Seremban's old town, established by Burmese Christian missionaries, has been supporting Myanmar refugee children since 2012 by addressing their health and educational needs. IMU University organized an event at LFLC to screen the oral and general health of these children, involving Medical, Dental, and Nursing students in an interprofessional team-based learning activity.

Methods:
A descriptive cross-sectional study was conducted to assess the readiness of health profession students for interprofessional learning. Data were collected using the Readiness for Interprofessional Learning Scale (RIPLS), a structured questionnaire with 19 questions divided into four subcategories: teamwork and collaboration, negative professional identity, positive professional identity, and roles and responsibilities.

Results:
The study involved 55 students (30 from Medicine, 11 from Nursing, and 14 from Dentistry) and 28 refugee children. Analysis

showed no significant differences among the professions across most RIPLS subcategories. However, ANOVA revealed a significant difference in the "Roles and Responsibilities" subscale among the student groups.

Conclusion

The study demonstrated a strong readiness for interprofessional learning among students, as shown by high RIPLS scores. However, incorporating this into the formal curriculum requires careful planning and a phased approach to defining professional roles and responsibilities. Interprofessional team-based health screenings for refugee children enhance student communication and teamwork, promoting mutual learning across disciplines. IPE proved highly beneficial for students and the community, fostering collaboration among three disciplines.

Takeaway Message:

Conducting interprofessional team-based health screenings for refugee children promotes communication and effective teamwork among students. It allows students to expand their understanding of other disciplines through mutual learning. In summary, IPE proved highly beneficial for students and the community as it involved the collaboration of three disciplines within one team.

ABSTRACT ID:

EPF-TAL03

An Exploration into Antiquated Terminology in Medical Education

Yap Hui Nee[1], Tai Suyee Sophia[1], Rovindu Sandul Hettige[1], Sameera Anuraddha Gunawardena[1]

[1]IMU University, Malaysia

Background:

English is the commonest medium in medical education in many institutions worldwide. Many terms in the medical lexicon have an archaic and colonial origin which are either inapplicable in today's context or too specific for Western literature and culture. Students from non-English speaking backgrounds studying medicine often encounter difficulties in understanding the relevance of these terms. This paper aims to identify and reflect on such inappropriate and outdated terms in medicine.

Methods:

The most commonly used textbooks for each subject of the preclinical medical program in the International Medical University library were browsed for terms perceived by the authors as archaic, inappropriate or inaccurate. Their etymologies were further explored using online resources according to usage, origin and reasons for inappropriateness.

Results:

Out of the several terms that were identified, the majority are terms that refer to social elements or behaviours of a bygone era. Terms such as washerwoman's hands would make no sense in today's context as with the advent of washing machines and laundromats, students would not know who a washerwoman is or what her hands would look like. Certain terms such as Dromedary fever, Diogenes syndrome are inaccurate and confusing in their reference. Similarly, terms such as Miss Havisham syndrome or Liliputian hallucinations would not be comprehensible without a deeper knowledge of English literature. Some terms such as mad-hatter disease or cretinism are essentially derogatory towards certain elements in society..

Conclusion

Though in the past, these terms may have been useful to facilitate comprehension of complex medical phenomena, they provide little meaning or relevance to the current generation of medical students. Teachers will also need to explain the historical context of these terms if students are expected to know them. Thus, their continued usage in medical education, especially in assessments, needs to be reconsidered.

Takeaway Message:
Several outdated and inappropriate terms are still in use in medical textbooks and clinical teaching which need to be revised and rephrased to facilitate better understanding of medicine among the current generation of medical students.

ABSTRACT ID:
EPF-TAL04

Perception, Experiences, and Satisfaction of Undergraduate Medical Students with E-Learning during Biomedical Course with Physiology Topics

Ami Febriza[1], Nurmila[1], Irwan Ashari[1]
[1]*University of Muhammadiyah Makassar, Indonesia*

Aim:
The disruption of medical education has led to a drastic change; therefore, we need to maximize the benefits of technology in learning, including E-Learning. This study explores how E-Learning could influence the academic performance, especially in physiology topics in Biomedical courses.

Methods:
We surveyed 267 undergraduate medical students to collect data. The questionnaire evaluates how E-Learning enhances physiology learning in undergraduate medical students. Data were presented using descriptive statistics, including frequencies and percentages.

Results:
It was a cross-sectional study with 267 students as respondents from the Biomedical course. Most respondents reported no obstacles (82%), but some indicated challenges with inadequate networks (4%), incomplete learning resources in e-learning (4%), and server errors (4%). Our study found that E-learning is a source of motivation for students as it keeps them interested in the learning process (agreed 35%, strongly agreed 63%). Regarding formative assessment, our study found that the quizzes provided in the e-learning platform aligned with learning objectives and were easy to understand (agreed 45%, strongly agreed 53%). Furthermore, 30% of respondents disagreed that traditional face-to-face learning alone is better than using E-Learning.

Conclusion
Most respondents reported that E-learning had improved their motivation to learn. The display and accessibility of E-learning were of good quality. The E-Learning was provided with formative assessment that could improve students' knowledge about the topics.

Takeaway Message:
Medical students have found that e-learning is a valuable addition to their learning experience, helping them understand physiology concepts better. However, there is room for improvement in specific aspects of the e-learning program used in the study. E-learning has the potential to be a valuable tool for enhancing medical student education, especially in complex subjects like physiology. It is important to develop and implement e-learning programs thoughtfully, taking into consideration student needs and preferences.

ABSTRACT ID:
EPF-TAL07

Developing Interprofessional Case-Based Learning for Cardiac Rehabilitation: Enhancing Confidence in Physical Therapy Students

Phailin Thawornchеep[1], Saikaew Chuachan[1], Nannapat Yodmanee[1]
[1]*Prince of Songkla University, Thailand*

Background:
This study examines the role of case-based learning in enhancing physical therapy student

confidence in cardiac rehabilitation for coronary artery bypass graft patients.

Methods:
A quasi-experimental design with pre- and post-tests was conducted with a single group of 33 third-year physical therapy students at the faculty of medicine, Prince of Songkla University. The scenario in cardiac rehabilitation, including pre-operative, post-operative, and recovery phases. Self-directed questionnaires measured confidence before and after the learning sessions.

Results:
Ninety-seven percent of the students participated and reported significant increases in confidence regarding their knowledge comprehension ($p < 0.0001$), physical therapy skills ($p < 0.0001$), and communication skills ($p < 0.0001$) following the CBL session.

Conclusion
This study indicates that engaging in CBL for cardiac rehabilitation improve students' confidence in their physical therapy roles in patient care. It also enhances communication with healthcare professionals and problem-solving abilities.

Takeaway Message:
CBL is deemed a valuable learning method for physical therapy and other health science students, playing a significant role in patient care.

ABSTRACT ID:
EPF-TAL08

Analysis of Students' Satisfaction and Effectiveness of Virtual Microscopy in Undergraduate Pathology Teaching: A Randomized Cross-over Trial Study

Thin Thin Win[1], Saint Nway Aye[1], Sunil Pazhayanur Venkateswaran[1], Purushotham Krishnappa[1], Arun Kumar Basavaraj[1], Dhanashri Kshitij Panse[1]
[1]IMU University, Malaysia

Background:
Virtual microscopy (VM) has been emerging significantly in teaching and learning pathology in medical education. It is being introduced into the continuing educational and self-assessment programs of pathology educational organizations. Many studies on VM had reported both advantages and limitations, especially in undergraduate medical teaching. We aimed to analyze students' satisfaction and effectiveness on VM compared to light microscopy (LM) in our institution.

Methodology:
This is a randomized cross-over trial study in which 88 medical students of year 1 and 2 participated. Sets of pre-validated questionnaires with a 5-point Likert-type scale were used to analyze the students' satisfaction on both LM and VM. Pre-test and post-test comprising 10 one best answer (OBA) questions were used to assess the effectiveness of VM in learning histopathology.

Results:
Most of the students (more than 65%) gave positive feedback on the questionnaires analyzing students' satisfaction on VM. Assessing the effectiveness of VM showed the mean score of the post-test in VM group (9.13 ± 1.19) was higher than that of the LM group (8.61 ± 1.63). Both groups' performance in pre-test and post-test OBAs were statistically significant ($p < 0.001$).

Conclusion
This study confirmed the students' satisfaction with VM over LM, and most of the students gave positive feedback on VM. VM is more effective in learning histopathological images and understanding of students' histopathological identification compared with LM. VM should be integrated into the e-learning platform for effective teaching in medical education.

Takeaway Message:
Virtual microscopy is more effective in learning histopathological images and understanding of students' histopathological identification compared with light microscopy. It should be integrated into the e-learning platform for effective teaching in medical education.

ABSTRACT ID:
EPF-TAL09

Team Up for Success: Enhancing Multidisciplinary Team-Based Learning

Elsa Haniffah Mejia Mohamed[1],
Dharmani Devi Murugan[1],
Nur Lisa Zaharan[1],
Lim Quan Hziung[1]
[1]*Universiti Malaya, Malaysia*

Background:
Team-based learning (TBL) is an effective educational strategy that enhances student engagement and understanding through active learning and teamwork. Over the past five years, we have implemented TBL in our Theme Session class for the Insulin and Antidiabetic Agents topic. Feedback from students revealed difficulties in identifying incorrect information in videos, prompting us to introduce modifications for improved clarity and learning outcomes.

Objective:
To enhance the effectiveness of TBL in a multidisciplinary theme session on the pharmacological management of diabetes by through selectivity and incorporating structured feedback mechanisms.

Methods:
Two weeks before the session, 18 groups of 8-10 students each were assigned one of eight clinical cases. Each group created a 3-minute video presenting their assigned case and solutions. To improve concentration and focus, only the best video out of 2-3 submissions per case was selected and played. Students were also informed that they would be quizzed individually based on lecture contents and assigned reading materials (iRAT). The session included a review of the iRAT and in-class discussion on the selected videos, as well as provision of written feedback on all submitted videos.

Results:
The introduction of written feedback and the selection of the best videos improved student engagement and learning outcomes. Students provided positive qualitative feedback, noting the session was informative, interactive, and enjoyable. They valued the detailed and timely feedback as well as the opportunity to engage in peer learning. Additionally, students appreciated the corrections made by lecturers during the session and in the written comments, which clarified misunderstandings and enhanced their comprehension.

Conclusion
Incorporating structured feedback and selecting the best videos in TBL sessions on the pharmacological management of diabetes significantly enhances student engagement and learning outcomes. This approach can be applied to other medical education topics to foster a collaborative and interactive learning environment.

Takeaway Message:
Incorporating structured feedback teaching sessions enhances student engagement and learning outcomes. Clear, detailed and timely feedback process helps students' correct misunderstandings and actively participate

in the learning process. This approach can be effectively applied to other medical education topics to foster a collaborative and interactive learning environment.

ABSTRACT ID:
EPF-TAL10

Virtual Reality (VR)- A Way Forward to One Health

Nurul Rimadhayanti Hamzah[1], Dharshan Kumar Kumarasan[1], Pek Sam Chong[1]
[1]*IMU University, Malaysia*

Background:
One Health is a collaborative, multisectoral, and transdisciplinary approach that recognizes the interconnectedness of human, animal, and environmental health. Outbreaks of diseases involving humans, animals, and the environment have highlighted the need for a comprehensive, interdisciplinary understanding of health. This questions the effectiveness of higher education's traditionally siloed approach in preparing students for the One Health concept. Virtual Reality (VR) has emerged as a learning tool to bridge this educational gap.

VR-Basic Life Support (BLS) simulation was developed in 2022 at IMU University. This VR simulation places students from various disciplines, including science, biomedical science, medicine, nutrition, and Chinese medicine, in a virtual railway station to perform BLS on a trauma patient. The scenario includes realistic virtual tools, lectures, and interactive hands-on experience with a manikin, enhancing student engagement and facilitating the teaching of complex, integrative concepts.

Methods:
A survey conducted in 2023 collected 130 anonymous responses to explore students' experiences using VR as a learning tool at IMU University.

Results:
84% of students finding it engaging and interesting with 67% favouring it over traditional teaching methods. Positive feedback included comments such as "great experience for studying; immersive and fun learning", "a valuable medium for visualizing real-life events", and "interesting and a good way of learning". However, less than 50% of students reported discomfort wearing VR headsets. Suggestions for improvement included enhancing the calibration between hand movements and the virtual manikin to improve interaction accuracy.

Conclusion
VR is an innovative learning tool that effectively engages and enhances students' learning experiences. Despite some discomfort with VR headsets, continuous evaluation and refinement of VR learning strategies are crucial. High fidelity and accurate simulations are essential to provide reliable and realistic representations of health scenarios, making VR a powerful tool for promoting the One Health approach.

Takeaway Message:
VR has the potential to significantly enhance educational experiences, making it a powerful tool for promoting the One Health approach.

ABSTRACT ID:
EPF-TAL11

Enhancing Engagement and Motivation Through Self-Directed Learning and Leaderboards: A Synergistic Approach

Sasikala Devi Amirthalingam[1], Shamala Ramasamy[1], Ranila Ishani Sirisinghe[1], Norhasliza Hashim[1]
[1]*IMU University, Malaysia*

Background:
Introduction to Health Profession (IHP) in semester 1 introduces medical students to communication skills, ethics and teamwork.

Current students belong to Generation Z (GenZ) also known as digital generation. To foster engagement and cultivate self-directed learners, we introduced gamification features to learning activities in the module.

Methods:
Learning material on the e-Learn portal is designed with leaderboard features to induce competitiveness, motivation to increase academic performance and provide immediate feedback. Students earn badges upon completion of individual and collaborative work tasks. A four-point Likert scale of strongly agree to strongly disagree was used in a six-question feedback form on gamification learning followed by open ended comments. The objective of this feedback is to measure students' perceptions regarding integration of gamification components in learning activities. The total number of respondents was 160 Year 1 medical students.

Results:
All questions had 71 (44%) responses in the strongly agree category. Responses from open comments indicated that students found quizzes and badges fun and interesting. Respondents reported incorporating gamification components to the module was motivating and encouraged participation. Overall, the responses indicate a positive reception towards gamification elements in the IHP module, with many students strongly agreeing (range of 44% - 51%) or agreeing (range of 44% - 48%) with each item. A cumulation of 11% showed disagreement on motivation of earning points of leaderboard for learning. Followed by 9% showed disagreements on self-directed learning in IHP module, the likeability of usage of gamification elements and continuation of learning to obtain badge based on knowledge checks respectively. Overall, students felt gamification helped them learn more effectively.

Conclusion
The leaderboard and gamification elements motivated students in self-directed and collaborative learning and can be used to engage Gen Z learners. In future, more engaging gamification type of learning should be introduced in medical education.

Takeaway Message:
Leaderboard and gamification elements motivated students in self-directed and collaborative learning and made learning fun, engaging and encouraged participation in the learning activities in the eLearn portal.

ABSTRACT ID:
EPF-TAL12

Factors Influencing Mentorship in Enhancing Generic Skills Development Among Fourth-Year Pre-Clinical Students

Olivia Dharmawan[1], Gisella Anastasia[1], Natalia Puspadewi[1]
[1]*Atma Jaya Catholic University of Indonesia, Indonesia*

Background:
Generic skills such as communication, collaboration, critical thinking, problem solving, and self-awareness play an important role in ensuring high quality and efficacy of health services. In medicine, physicians have the opportunity to enhance their generic skills during medical education. Therefore, medical education institutions are responsible for fostering its development. Mentoring method is a promising yet underutilized learning approach in Indonesia. Existing research tends to examined the relation between mentoring and generic skills abroad. However, studies explaining how mentoring activities influenced the enhancement of students' generic skills are still limited. The study aimed to describe and analyze various factors that influenced the development of undergraduate medical students' generic skills.

Methods:
This was a qualitative phenomenological study that explored the perspective of 10 fourth-year undergraduate medical students who participated in group mentoring activities during a four-week elective block. Data was collected using in-depth interviews and observations, then analyzed using deductive thematic analysis.

Results:
Mentor quality and learning environment are two factors that largely influenced generic skills development. Mentor quality consists of knowledge, affective, attributes, and ability to model desired behavior. These factors are associated with better communication, critical thinking, problem solving, and self-awareness skills. Constructive feedback given by mentors encourages students' personal growth. Group mentoring fosters peer learning experiences among students within group. Moreover, utilization of online communication applications during mentoring also influences students' learning progress. External factors such as type and the duration of assignment given facilitates students' generic skills enhancement.

Conclusion
Enhancing students' generic skills hinges on several important factors, including the mentor's proficiency, student engagement and participation, also utilization of online communication application. Students developed their generic skills through active learning experiences facilitated by mentors, interactions with fellow group members, and engagement with assignment projects within the group mentoring setting.

Takeaway Message:
Mentoring learning methods enhanced students' generic skills in various ways. Some factors directly influenced generic skills development, such as the quality of mentors, constructive feedback, peer learning, and so on. However, there are also several other factors influenced student behavior and involvement in developing generic skills, for instance the learning environment and platform used during mentoring. These factors support institutions for executing an impactful mentoring in enhancing generic skills development among medical students.

ABSTRACT ID:
EPF-TAL13

Exploring Students' Perceptions and Receptivity to Anthropomorphism in Microbiology Education

Saritha Satish Rao[1]
[1]*S. S. Institute of Medical Sciences & Research Centre, India.*

Background:
Microbiology appears quite daunting for MBBS students because of its complexities and extensive content. The shift towards student-centric learning and emphasis on higher levels of Bloom's taxonomy has opened the doors for novel teaching approaches.

Objectives:
The objective of this study was to see how receptive students are to the use of anthropomorphism in microbiology and their perceptions about it.

Methodology:
A didactic lecture on using cartoon as educational tool was given, following which group activity was conducted for 161 students of II MBBS. The students were randomly divided into groups of 10 students each and asked to depict few allotted concepts of microbiology in the form of cartoons/comic strips. Each poster was then discussed and graded both by concerned faculty and student peers. They were then asked to fill a questionnaire to know their perceptions about cartoons and comic strips being used as educational tools to learn microbiology.

Results:
Discussion about each poster was an interactive, fun way of learning. Difficult concepts such as immunology was easily understood by most students through comic strip narratives, wherein each immunological cell had been anthropomorphised, making it easy to comprehend. At the end of the session, students gave positive feedback about this this fun- filled novel approach of learning. The students' Likert Scale scores in questionnaire study, indicated that 76.8% wanted to start using cartoons in their routine studies and 79.3% were in favour of cartoons getting incorporated in the normal medical curriculum.

Conclusion
Better understanding of difficult concepts observed in the students during the group activity and positive feedback from the questionnaire-based study concurs and encourages the feasibility of cartoons been used as complementary educational tools.

Takeaway Message:
Anthropomorphism is a novel approach in medical curriculum which can be blended easily with traditional teaching methods.

ABSTRACT ID:
EPF-TAL14

Histology 3D: Is It for All?

Rajesh Thangarajan[1], Vivek Perumal[1], Ranganath Vallabhajosyula[1]
[1]Lee Kong Chian School of Medicine, NTU, Singapore

Background:
Histology is almost always taught using 2D images of stained microscopy slides that students mentally reconstruct to understand the 3D architecture of the specific tissue. This task adds more cognitive load in learning, especially on students with less spatial ability. To address these issues, we developed a comprehensive ultramicroscopic 3D model of skin histology named 3D-skin. This study evaluates the educational value of tailor-made resource to benefit students with varying spatial ability.

Methods:
An all-in-one 3D histology model showing details from light to electron microscopic details was built using Blender-3D and deployed into histology learning. MBBS students were invited to use and evaluate the resource and compare the experience against the use of online Zoomify digital slides. Following this qualitative and quantitative user data was obtained.

Results:
Eighty-two MBBS students with a mean spatial ability of 38 % participated. They reported that the 3D-Skin was interactive, well-labeled, coloured, and enabled isolating individual tissues (82%). It was engaging (90%) without demanding additional cognitive load while studying (78%). It was tailor-made to suit their needs (87%) and was available free of cost (76%). However, some limitations addressed included not depicting real-life images (13%), and not being evaluated in exams (20%).

Conclusion
Ultramicroscopic detailed 3D models can suit all students in histology learning and is independent of their spatial ability. These can be effectively used alongside routine microscopy slides to learn histology.

Takeaway Message:
3D histology models can be custom developed to display light to electron microscopic details. These will reduce the need to use multiple learning resources to understand histology; these could not replace but could work in conjunction with glass slides.

ABSTRACT ID:
EPF-TAL15

Enhancing Consultation Skills Among Teachers in Undergraduate Medical Education Through Observed Structured Teaching Exercises (OSTE)

Sajida Naseem[1], Syeda Hanaa Fatima[2]
[1]*Shifa Tameer-e-Millat University, Pakistan*,
[2]*National University of Management Sciences, Pakistan*

Background:
Effective consultation improves diagnosis, patients understanding and enhance patients' satisfaction. OSTE is a high-fidelity training and assessment method for advancing the teaching and interpersonal communication skills of faculty members. Training of the trainers in medical education is a fundamental pillar of any curriculum delivery in order to achieve desired outcomes among its students. This research aims to enhance capacity building among its undergraduate trainers. The objective was to evaluate the performance of lecturers/ trainers in a pre and post training in consultation skills through OSTE and compare them with controls.

Methodology:
An experimental study was carried out. Group of lecturers (n=20) involved in the training of medical students on consultation skills were selected and divided into intervention and control group. A module of two weeks was developed by the experts on consultations skills. Training material consisted of reading on essential elements of consultation skills adapted from Kalamazoo census statement, was shared with both groups. In intervention group, multiple modalities were done in small group discussions, one on one teaching, video playing of teaching session, observations of rehearsing sessions with simulated patients. Feedback was provided to the intervention group following each consultation. OSTE stations along with checklist for assessment were developed to evaluate the performance of lecturers in simulated scenarios of consultation by experts belonging to Family Medicine. After four weeks of the training, these experts marked the performance of each participant. Feedback was provided.

Results:
This consisted of 10 participants in each group. Baseline performance in both the groups were similar, median 6.5 (2). Improvement in terms of performance was seen among both groups, with intervention group scoring significantly higher median 8(3) in the post intervention group as compared to controls.7(3), $p< 0.05$.

Conclusion
Training of teachers in consultation skills promotes learning.

Takeaway Message:
Training of teachers in consultation skills is often an ignored topic, therefore this should be done at every level of teaching faculty in order to have improved learning outcomes.

IMU-RHIME ABSTRACTS

Faculty Development

ABSTRACT ID:
RHIME-03FAD

Towards One Health: Empowering Faculty, Enriching Curriculum through Integration of Artificial Intelligence Tools via the NKH Approach in Healthcare Research

Noor-i-Kiran Naeem[1], Zil-e-Fatima Naeem[2]
[1]*ABWA Medical College, Pakistan,*
[2]*Services Hospital, Pakistan*

Background:
The integration of Artificial Intelligence (AI) in healthcare research heralds significant enhancements in research quality, efficiency, and outcomes. Addressing the imperative for innovative educational strategies, the NKH (Name, Know, How) Approach emerges as a groundbreaking method to empower researchers with the competencies to adeptly navigate and leverage AI technologies.

Rationale of Innovation:
The NKH Approach is founded on two main principles. First, it identifies a gap in the effective adoption and utilization of AI tools in research, recognizing that the mere availability of AI technologies does not ensure their practical application. This framework simplifies AI integration into healthcare research by delineating a three-step process: identifying AI tools (Name), understanding their functions and limitations (Know), and effectively applying them (How). Second, it aligns with the One Health concept, emphasizing AI's role in synthesizing data across human, animal, and environmental health domains to foster a collaborative, multidisciplinary approach to healthcare.

Methods:
This approach was operationalized through a series of six structured workshops and two online sessions conducted across three cities in Pakistan from November 2023 to February 2024, involving 290 faculty members from various medical colleges. These sessions aimed to navigate participants through the NKH process, combining theoretical insights with practical, hands-on experiences in employing AI tools for research activities.

Results of Evaluation:
The NKH Approach was evaluated using the Kirkpatrick Model, yielding positive outcomes across Reaction, Learning, Behavior, and Results domains. Participants exhibited favorable reactions, demonstrating the workshops' success in fostering an environment conducive to AI integration in research. Pre- and post-test evaluations showed significant enhancements in understanding and applying AI concepts ($p<0.05$), with the 3-month follow-up indicating a tangible shift towards integrating AI tools in research and teaching practices ($p<0.05$). Notably, the approach facilitated faculty members in increasing research output and manuscript preparation, underscoring its impactful contribution to academic productivity and innovation.

Potential Educational Impact:
Incorporating the NKH Approach into healthcare research education promises to enrich the research landscape and curriculum profoundly. By endowing faculty with the requisite knowledge and skills to navigate AI technologies effectively, this framework sets the stage for an era of heightened innovation and continuous learning in healthcare research.

Feasibility of Innovation:
The successful execution of this series of workshops illustrates the feasibility of integrating the NKH Approach into existing educational frameworks. With a model adaptable for both in-person and online formats, the initiative offers a scalable and flexible solution for the widespread adoption of AI in healthcare research education.

Conclusion:
The initiative to integrate AI tools into healthcare research through the NKH

Approach represents a pivotal step towards fostering a culture of innovation within Pakistan's medical research community. This effort aligns with the global objective of advancing healthcare education and research through technological integration. The significant improvement in faculty capability to utilize AI tools as evidenced by the workshops' outcomes not only underscores the effectiveness of the NKH Approach but also positions Pakistan's healthcare research at the forefront of technological advancement, contributing to the global movement towards One Health.

Take Home Message:

The NKH Approach, through its innovative integration of Artificial Intelligence (AI) tools in healthcare research, stands as a testament to the transformative power of educational methodologies in enhancing research quality, efficiency, and outcomes. By bridging the gap between the availability of AI technologies and their effective application, the NKH Approach underscores the significance of a structured, three-step process for empowering researchers. This framework not only simplifies the adoption of AI in healthcare research but also aligns with the One Health concept, fostering a collaborative, multidisciplinary approach to health. The positive outcomes from the workshops, demonstrated through the Kirkpatrick Model evaluation, affirm the approach's efficacy in fostering a conducive environment for AI integration, enhancing participants' understanding and application of AI concepts, and ultimately leading to increased research output and innovation. The NKH Approach's adaptability and scalability highlight its potential as a cornerstone for continuous learning and innovation in healthcare research education. This initiative marks a pivotal stride towards incorporating technology in medical research, positioning Pakistan's healthcare research community at the vanguard of global technological advancement in alignment with the One Health initiative.

Teaching and Learning

ABSTRACT ID:
RHIME-01TAL

LIVE Education: Leveraging Immersive technology with Virtual Emulation for Education in training of Armed Forces Combatants in Battle Field Nursing Assistance: A Prospective Mixed Method Study

Rajkumar Maurya[1]
[1]*Section Hospital, Central Government, India*

Background:

Effective training is crucial for non-medico combatants as they care under duress. Existing methods (classroom, mannequins, role plays) have limitations in acquiring higher level of knowledge and have biased assessment as work place based assessment is not possible in hostile zone. Study explored, wether use of an indigenously developed Virtual/Extended Reality (VR/XR) app ("LIVE Education"), enhance training, motivation, and knowledge acquisition in non-medico combatants compared to existing methods.

Rationale of Innovation:

Learning in immersive experience using VR/XR, provides 3D experience that supports learning in safe and controlled environment and provides real life like experience with haptic feedback and realistic interactions. This combination of interactivity and engagement with emotion, can lead to faster acquisition of information and skills which enhance ability of learners to reach higher level of competence in learning. There is no such VR/XR based application till date, which can help training in hostile terrain and war like zone. Existing VR-CPR apps have standard hospital/Civil settings, hence both learning and assessment gets compromised. "LIVE Education" app, provides life-like hostile terrain and war-like zone, for training and is an effort in direction to bridge

gap in training for better health care outcome in armed forces or similar scenario.

Methods:
Sixty trainees were selected using simple random sampling and divided into two groups of 30 each using a serially numbered, sealed opaque envelope as groups 1 and 2, for CPR training, one with existing methods and other "LIVE Education" app, followed by cross-over after six weeks. Assessment for both groups was standardised using a simulated environment of hostile terrain as well. Data collection tools consisted of questionaries on Google Forms, having 31 questions and objective assessment was carried out by directly observed procedural skills, with checklist of 12 parameters. Data was recorded four times from T0-T3.

Results:
Study found intra-group statistically significant difference with r-ANOVA ($p<0.05$). However, there was no significant difference between two groups while performing CPR over the period of time ($p >0.05$). The majority of participants (>73%), expressed a preference for learning with VR, citing benefits such as improved memory retention, a realistic experience, and increased interest. (40-73%) However, concerns regarding cost, claustrophobia, and lack of a traditional classroom environment were noted with VR training. (43-63%).

Potential Educational Impact:
"LIVE Education" app has potential for immediate as well as long term training impact with its real time exposure to learning and assessment. It provides combination of interactivity and engagement with emotion which can lead to faster acquisition of information and skills and enhance the ability of learners to reach higher level of competence in learning..

Feasibility of Innovation:
With present AI driven era "LIVE Education" VR app is very much practical and developed timely within effective cost and was well accepted by trainees.

Conclusion:
Innovative VR app "LIVE Education" was successfully implemented, offering a 3D learning experience. It provides real-life scenarios, haptic feedback, enhanced engagement and long-term retention. Positive reception and significant improvements suggest that it can complement traditional methods and revolutionise medical training.

Take Home Message:
The indigenous VR/XR simulation app "LIVE Education" is as effective as traditional methods in training non-medico combatants, offering additional benefits of improved learner motivation, satisfaction, and enhanced knowledge acquisition across cognitive, psychomotor, and affective domains. Despite few concerns such as claustrophobia and initial training hiccoughs, the immersive nature of VR training provides a realistic and engaging learning experience that could revolutionise combat medic training.

ABSTRACT ID:
RHIME-02TAL

Skin-3D: From Light to Electron Microscopy in One Click!

Rajesh Thangarajan[1], Vivek Perumal[2], Ranganath Vallabhajosyula[2]
[1]Management Science University, Malaysia
[2]Lee Kong Chian School of Medicine, NTU, Singapore

Background:
Histology is an integral part of anatomy education. Even today, it is taught using 2D images of H&E microscopic sections. Using these, students mentally reconstruct the 3D architecture of the specific tissue; this is a cognitively demanding task especially on students with less spatial ability. This study evaluates the educational value of tailor-made resource to address these issues. Rationale for innovation: How about innovating a comprehensive ultramicroscopic histology

resource that presents all possible structural details? This would enable to swap between different magnifications, illustrations, electron micrographs, special stains and so visualize the complete detail of a given tissue in one click and provide a structural basis to learn physiology and pathology.

Methods:
Resource development: An all-in-one 3D histology model for skin (Skin-3D) showing details from light to electron microscopic details was built using Blender-3D and deployed into histology learning for MBBS students. The details range from epithelial cells through desmosomes, tonofilaments, anchoring fibrils and cytoskeleton.

Study design:
Students used and evaluated the Skin-3D and compared the experience against standard H&E slides online (digitalized and Zoomified). Following this, qualitative and quantitative user data was obtained that included a test for spatial ability and cognitive load.

Results:
Eighty-two students with a mean spatial ability of 38% participated in the study. They agreed the user interface that was interactive, well-labeled, coloured, and enabled isolating individual tissues (82%). The learning process was engaging (90%) without demanding additional cognitive load (78%). Students also appreciated that the model was tailor-made to suit their curricular needs (87%) and was available free of cost (76%). Skin-3D does have limitations- while it helped visuospatial understanding of histology it did not depict real-life images (13%) and were not part of the examination material (20%). Yet, students preferred to use the 3D model in conjunction with routine slides.

Educational impact:
Skin-3D is the first of the kind comprehensive ultramicroscopic histology model. You could fly through 3D histological details viewed from 4 to 100K times. It is novel in a way that the labels are inbuilt, meaning they appear only when a specific structure is zoomed to screen size; this does not create obscuring labelling lines through the image and hide the necessary details. This model is also compatible to view in VR headsets. It enables students not only to learn most possible details at one go, but also self-evaluate their understanding.

Feasibility of Innovation:
Developed and launched on open-source databases, Skin-3D is completely free of cost. Considering the educational potential, we have made the model and the source code both available for free to anyone interested. Educators can modify the details/labels to their curricular needs. A short video demo of the Skin-3D can be viewed at https://youtu.be/htBhZXUvZ-M.

Conclusion:
Skin-3D is an interactive ultramicroscopic resource that suits all students learning histology. It is independent of their spatial ability and can be effectively used alongside routine microscopy slides to learn histology.

Take Home Message:
3D histology models can be custom developed to display light to electron microscopic details. The material is evaluated to be pedagogically useful, so this could be confidently adopted into histology learning. As the 3D development is not feasible to all educators, we have shared the model and access code freely for anyone interested to benefit from this effort.

ABSTRACT ID:
RHIME-04TAL

Revolutionising Basic Life Support Training: A Learning Toolkit for Malaysian Lay Rescuers

Mayura Damanhuri[1], Soo Tein Ngoi[1], Wei-Han Hong[1], Mohd Hafyzuddin Md Yusuf[1], Mohammad Aizuddin Azizah Ariffin[1], Mei Chan Chong[1], Mohd Afiq Mohd Nor[1], Ina Ismiarti Shariffuddin[1]
[1]*University Malaya, Malaysia*

Background:
In Malaysia, cardiovascular diseases are the most common cause of death, often presenting as sudden cardiac arrests. Out-of-hospital cardiac arrest often results in poor outcomes for patients. This situation is especially critical in Malaysia, with a lower-than-average survival rate of 0.5%. The role of lay rescuers is crucial in rapidly initiating the chain of survival before the paramedics arrive. Early recognition, performing good quality cardiopulmonary resuscitation (CPR), and early defibrillation can all be achieved by the trained public.

Rationale of Innovation:
Despite the Basic Life Support (BLS) theory being part of the national curriculum in Malaysia, the youths are not equipped with the confidence and psychomotor competency to perform BLS. Therefore, we aim to develop a comprehensive bilingual BLS Learning Toolkit to effectively train youths as competent lay rescuers.

Methods:
A comprehensive bilingual BLS Learning Toolkit encompassing a range of interactive learning materials, including lectures, instructional videos, hands-on activities, and assessment tools were developed to cover key BLS components such as CPR, automated external defibrillators (AEDs) use, and basic life support techniques. A CPR pillow was designed to complement the training module. A pre-post study was conducted in five secondary schools in Klang Valley to assess the effectiveness of the training module.

Results of Evaluation:
A total of 203 participants were recruited in this study, 68% (n=138) completed the entire training module. The first phase of the training (instructor-led session) resulted in a 58% improvement in participants' knowledge, awareness, and aspirations about performing CPR and using AED in emergencies, and a 115% improvement in their practical skills. The second phase involved an e-learning module on the MyResQ mobile application. A post-assessment conducted five months after phase 1 showed that participants who used MyResQ for continuous learning (n=71) scored 28% higher in knowledge and awareness, and 18% higher in practical skills assessments than those who did not use the application (n=67). Feedback from participants indicated high confidence levels in performing CPR in emergencies (91%), teaching family members correct CPR techniques (91%), and sharing CPR knowledge within their communities (88%).

Potential Educational Impact:
This study transforms health and safety education by integrating practical BLS training into the curriculum. The hybrid learning approach enhances knowledge retention, while the use of technology for continuous learning highlights its potential in education. This could inspire a shift towards more practical, application-based learning in schools, empowering students with knowledge and skills that could potentially save lives.

Feasibility of Innovation:
This BLS Learning Toolkit is practical, offering flexible, engaging learning through a hybrid approach. The toolkit is also cost-effective, leveraging digital platforms for content delivery and updates. The user-friendly design and interactive activities increase its acceptability among learners and educators, making it a feasible solution for BLS education.

Conclusion:
Our study demonstrates the effectiveness of a hybrid BLS Learning Toolkit in enhancing life-saving skills among Malaysian youths. We hope to unify the provision of BLS training for youths and make the module accessible to all, to create a first-rescuer culture in the community.

Takeaway Message:
The implementation of a comprehensive bilingual Basic Life Support (BLS) Learning Toolkit, inclusive of innovative tools like the CPR pillow, has the potential to significantly enhance the knowledge, skills, and confidence of Malaysian youths in performing life-saving techniques such as CPR and using AEDs. The CPR pillow, equipped with visual aids illustrating effective CPR parameters, serves as a practical and engaging tool for hands-on practice. The comprehensive hybrid approach, combining hands-on training with continuous e-learning via the MyResQ app, demonstrates the potential to improve out-of-hospital cardiac arrest outcomes by empowering lay rescuers and fostering a first-rescuer culture within the community.

ABSTRACT ID:
RHIME-05TAL

Eco-Arts: Innovative Art-Based Education for One Health Training in Medical Education

Krishna Mohan Surapaneni[1]
[1]*Panimalar Medical College Hospital & Research Institute, India*

Background:
The integration of arts into medical education, particularly through the Eco-Arts initiative, can enhance One Health training by fostering a holistic understanding of the interconnectedness between human, animal, and environmental health. The primary research question is: Can innovative art-based education improve medical students' awareness and attitudes towards One Health?

Rationale of Innovation:
The objective of the Eco-Arts initiative is to bridge the gap between medical practice and environmental health by incorporating creative methodologies into medical education. The rationale behind this innovation lies in the potential of the arts to stimulate critical thinking, empathy, and a broader perspective on health. This approach is original and innovative as it combines environmental education with artistic expression, creating a unique interdisciplinary learning experience that encourages students to consider the complex relationships within One Health.

Methods:
A mixed-methods study design was employed, combining quantitative surveys and qualitative interviews. Twenty-four final-year medical students from Panimalar Medical College Hospital & Research Institute participated in an eight-week-long Eco-Arts program. This program included interdisciplinary workshops, Short-term Experiences in Global Health trips (STEGHs), and collaborative art projects related to environmental and public health issues. Pre- and post-program surveys assessed changes in students' knowledge and attitudes towards One Health. Additionally, in-depth interviews were conducted to gain insights into students' experiences and the perceived impact of the program.

Results of Evaluation:
Quantitative analysis of survey data revealed a significant increase in students' understanding of One Health concepts, with the mean knowledge score rising from 55% pre-program to 85% post-program ($p < 0.001$). Attitudinal shifts were also observed, with 90% of students expressing a stronger commitment to considering environmental factors in their future medical practice, compared to 60% before the program. Qualitative interviews indicated that students found the Eco-Arts program engaging and transformative, emphasizing the value of creative approaches in medical education. Themes of increased environmental awareness, interdisciplinary

thinking, and enhanced empathy towards animals and ecosystems emerged prominently.

Potential Educational Impact:
The Eco-Arts initiative has the potential for both immediate and long-term educational impacts. Immediately, it enhances students' understanding and attitudes towards One Health, equipping them with a more holistic view of health that includes environmental considerations. In the long term, this approach could lead to the development of more compassionate and environmentally conscious healthcare professionals fostering a generation of doctors who are well-versed in the principles of One Health and prepared to address complex health challenges.

Feasibility of Innovation:
The practicality and cost-effectiveness of the Eco-Arts program make it a feasible addition to medical education. The program requires minimal resources, primarily involving time and creativity rather than expensive equipment or materials. It is highly acceptable to both learners and educators, as evidenced by the positive feedback and transformative experiences reported by participants.

Conclusion:
The Eco-Arts initiative substantially improved medical students' understanding and attitudes towards One Health, demonstrating that art-based education can effectively bridge the gap between medical practice and environmental health. These findings support the incorporation of Eco-Arts into medical curricula to cultivate a more holistic and compassionate approach to healthcare.

Takeaway Message:
The Eco-Arts initiative demonstrates that integrating art-based education into medical curricula can significantly enhance medical students' understanding of One Health principles. By fostering interdisciplinary thinking, environmental awareness, and empathy, this innovative approach prepares future healthcare professionals to address the complex, interconnected health challenges of our time. Implementing Eco-Arts in medical education is both feasible and impactful, promoting a holistic and compassionate approach to healthcare.

Special Acknowledgement

The organising committee appreciates the expert reviews by the following people:

IMEC 2024 Reviewers List

RHIME Award Reviewers

Diantha Soemantri
Ian Wilson
Kate Owen
Nilesh Kumar Mitra
Ray Peterson
Rehan Ahmed Khan

Oral & E-poster Reviewers

A. Sasikala Devi A/P A. Amirthalingam
Bhavani A/P Veasuvalingam
Chandrashekhar Thummala Hally Sreerama Reddy
Chen Yu Sui
Ebenezer Chitra Fabian
Juliet Mathew
Kavitha Nagandla
Kok Yih Yih
Lim Chooi Ling
Megan Hueh Zan Chong
Mohammad Arshad Ikram
Muneer Gohar Babar
Nilesh Kumar Mitra
Pathiyil Ravi Shankar
Siti Suriani Binti Abd Razak
Sow Chew Fei
Sunil Pazhayanur Venkateswaran
Thiba Rajoo A/P M P Rajoo
Vasudeva Rao Avupati
Wong Pei Se

RHIME Award Judges

Asma Ismail
Gary Rogers
Kamalan Jeevaratnam
Ronald Harden
Vishna Devi Nadarajah

Oral & E-poster Judges

Adlina Suleiman
Azhar Rashid
Ben Davis
Bhavani A/P Veasuvalingam
Camille Huser
Chandramani a/p Thuraisingham
Charmaine Lavinia
Choy Ker Woon
Dominic Johnson
Fabian Amalraj
Ganesh Ramachandran
Gnanajothy Ponnudurai
Htet Htet Norah
Ian Martin Symonds
Jaiprakash Mohanraj
Juliet Mathew
Kamran Sattar
Katarzyna Paczek
Kate Owen
Kavitha Nagandala
Kok Yih Yih
Lakshmi Selvaratnam
Lim Chooi Ling
Mahwish Arooj
Malaika Watanabe
Megan Chong
Mohamad Nurman Yaman
Muneer Gohar Babar
Nilesh Kumar Mitra
Norul Hidayah Mamat @ Muhammad
Pathiyil Ravi Shankar
Puneet Agarwal
Raheela Yasmin
Rehan Ahmed Khan
Rona Patey
Sarmistha Ghosh
Siti Suriani Abd Razak
Sow Chew Fei
Sunil Pazhayanur Venkateswaran
Supathiratheavy Rasiah
Thiba Rajoo
Vasudeva Rao Avupati
Wong Pei se
Yawar Hayat Khan

Thank you

The Organising Committee would like to thank the following for their generosity and support towards making the **17th International Medical Education Conference (IMEC 2024)** a success:

- **AMBOSS GmbH**
- **BMJ**
- **Elsevier (Singapore) Pte Ltd**
- **Esco Lifesciences Group**
- **Excelsoft Technologies Pvt Ltd**
- **IDEAL Consortium**
- **Indizium Sdn Bhd**
- **JAM.Web Services**
- **Lecturio GmbH**
- **MSIG Insurance Malaysia Berhad**
- **Redang Global Sdn Bhd**
- **SML Engineering Sdn Bhd**
- **Teroka Intan Sdn Bhd**
- **The University of Western Australia**
- **Uniprus Aluminium Sdn Bhd**
- **Univisual Integrated Sdn Bhd**

EXCELSOFT

Redefining the way people learn

Excelsoft is a leading provider of innovative technology solutions in the education and training sectors. With a proven track record of delivering cutting-edge eLearning solutions, we have served over 200 organizations and impacted over 30 million users worldwide. Our versatile solutions cater to diverse sectors, including universities, certification organizations, test publishers, schools, corporations, and government agencies.

Saras™
Test and Assessment

A Comprehensive AI-Powered Assessment Solution, from Authoring to Evaluation

easyProctor

Secure Exam Integrity with Our AI-Powered Remote Proctoring Platform

Content Services

Elevate Your Learning Experience with Custom Content and AR/VR Solutions

e-Assessment Awards 2024 FINALIST

Brandon Hall Group TECHNOLOGY EXCELLENCE AWARD GOLD 2022

e-Assessment Awards 2023 WINNER

Scan the QR

Email: sales@excelsoftcorp.com

Our Offices :
India | Malaysia | Singapore | UAE | UK | US

h.prime®

Digital Logbook

Designed for medical students to log their clinical experiences securely!

Secure

Comprehensive

Integrated

Digital Logbook is a sophisticated mobile application for colleges & universities using h.prime that allows medical students to securely document both clinical and non-clinical training experiences in a highly structured format

Colleges and universities using h.prime can monitor the progress of their students in real-time, using the documented records to assess competencies and track overall development. Digital Logbook ensures that all records are captured efficiently and accurately.

jamweb.com.au

jam.web

Make a difference in healthcare education

GROUP OF EIGHT AUSTRALIA
MEMBER

CRICOS 00126G | PRV12169 Australian University

UWA's health professions education courses provide a gateway to a career as a health educator. Study online and learn practical skills from experts in the comfort of your home. Explore the teaching, learning, assessment, and research methods in health professions education at a world top 100 university (QS 2025).

uwa.au/HPE

THE UNIVERSITY OF WESTERN AUSTRALIA

Mechanical & Electrical Engineering

Teroka Intan
Contractor & Engineer

We are specialists as below services:

- ✓ Air Conditioning
- ✓ Fire Protection
- ✓ Plumbing & Sanitary
- ✓ Building Automation
- ✓ Testing & Audit Work

Our Authorities:

- ✓ CIDB Grade 7
- ✓ Electrical Contractor Class C
- ✓ Gas Contractor Class B
- ✓ Green Building CxS
- ✓ GBI Facilitator

TEROKA INTAN SDN. BHD. (572 553-D)
No. 20, Jalan Puteri 7/11,
Bandar Puteri, 47100 Puchong,
Selangor Darul Ehsan
Tel : +603-8061 9380 Fax : +603-8061 2210
Email : terokaintan@tioxc.com

UNIVISUAL
INTEGRATED

Fire Alarm & Security Experts

Preventive Fire Alarm and Fire Protection System Maintenance

Examine and troubleshoot Fire Alarm System cables

New portable fire extinguishers supplied.

Provide a detailed account of the system tests performed

Verify Each Hydrant System

Annual maintenance of existing portable fire extinguishers, including renewal of the Bomba Certificate

info@univisual.com.my +603 - 3381 5606

20-2, Jalan Raya Barat 1/KS1, Pusat Perniagaan Raya Barat, 41100
Klang, Selangor Darul EHsan, Malaysia

www.univisual.com.my

imec2024@imu.edu.my

www.imu.edu.my/events/imec2024

International Medical Education Conference

https://x.com/IMECMalaysia #IMUIMEC2024

IMU University
126, Jalan Jalil Perkasa 19, Bukit Jalil,
57000 Kuala Lumpur, Malaysia
Tel : +603 8656 7228 Fax : +603 8656 8018
KP/JPS/5195/US/2, KP(JPS)/DFT/US/W03

The IMU has been certified with ISO 21001:2018 for the provision of Pre-University, Undergraduate and Postgraduate Programmes for the Medical and Healthcare Professions.

Every effort has been made to ensure the accuracy of the information given in this brochure but it is subject to alteration without notice. The University reserves the right to alter or delete any of the information included at any time and it shall not be bound by any errors or omissions and cannot accept liability in respect thereof. Please consult the Department of Student Services and Marketing for the most up-to-date information.

Published by the IMU Centre of Education and IMU Centre for Lifelong Learning.