2023 Global Health and Welfare Forum in Taiwan Health for All: Strengthen Well-being through Collaboration and Empowerment for the Attainment of New Normal

Nov. 7th-8th, 2023, Taipei, Taiwan

Program



WEBSITE

Table of Content

Welcome Messages	03
Forum Information	04
Floor Plan	05
Agenda	07
Opening Ceremony	13
Day 1 : November 7th, 2023 (Tuesday)	
Keynote Speeches	17
Plenary 1: Partnership and Networking in Global Health Governance	27
Parallel Session 1: Global Health Security: To Build Sustainable Preparedness for and Response to the Next Pandemic	39
Parallel Session 2: Teledentistry in Asia Pacific Countries – A Sustainable Solution to Oral Health for All	51
Day 2 :November 8th, 2023 (Wednesday)	
Plenary 2: Utilization of Digital Technology in Global Health Governance	59
Parallel Session 3: Resilience and Mental Health Promotion in Teens and Young Adults	67
Parallel Session 4: Autonomy, Independence, and Friendly Living in an Aging Society	77
Plenary 3: Challenge of Global Health Governance	87



- 2 -

Welcome Messages

On behalf of the Ministry of Health and Welfare, Republic of China (Taiwan), it is my great pleasure to welcome all of you joining us on November 7 and 8 at the 2023 Global Health and Welfare Forum in Taiwan.

The "Global Health and Welfare Forum in Taiwan" is an annual event that has been one of the most important public health



occasions in Asia and has been held for 19 consecutive years. The Forum convenes leaders from around the world of research, policy, and practice to share ideas and experiences that address the huge health and welfare challenges that beset our world. I wish to thank all the internationally renowned health experts, NGO leaders, and health officials from the world for having made this Forum a consistent success since its inauguration in 2005.

As many countries are learning to coexist with COVID-19, it's time for us to gradually resume our normal lives. The main theme of the Forum is "Health for All: Strengthening Well-being through Collaboration and Empowerment for the Attainment of the New Normal". The Forum will also discuss and expand on integrated topics, such as partnership, networking, challenges in global health governance, and the utilization of digital technology.

We are very excited and honored to have our international friends with us again at this prominent health occasion this year. With your contribution, it will continue as a platform for international exchange and cooperation in Asia. As your participation will certainly strengthen these efforts, I welcome you to take an active part in this year's Forum and hope you will have a pleasant stay in Taiwan.

With best wishes,

Jui-ym Hanh

Jui-Yuan Hsueh, M.D., LL.M. Minister of Health and Welfare Republic of China (Taiwan)

Forum Information

Date

Day 1 November 7, 2023 (Tuesday)09:30-17:00Day 2 November 8, 2023 (Wednesday)10:00-17:10

Physical Venue

CHANG YUNG-FA FOUNDATION International Convention Center, Taipei City

Website https://www.ghwftw.org/



Organizer

Ministry of Health and Welfare, R.O.C. (Taiwan) Ministry of Foreign Affairs, R.O.C. (Taiwan)

Rules and Regulations

Q&A

All participants who would like to raise Q&A shall identify yourself clearly by stating your name, the affiliated institution, and the job title before presenting your comments or questions.

Intellectual Property Rights

Please respect intellectual property rights of all presenters and do not take pictures of the screen during their presentation. To collect or cite, please ask forum staffs for the availability of presentation materials.

Floor Plan

11F, CHANG YUNG-FA FOUNDATION International Convention Center



Floor Plan

10F, CHANG YUNG-FA FOUNDATION International Convention Center



Agenda

Day 1 - November 7th, Tuesday

TIME	TOPICS		SPEAKERS	
8:30 - 9:30 (60 min)	Registration			
	Opening Ceremony Main Hall (Room 1101)			
9:30 - 9:40 (10 min)		Opening Per	formance	
9:40 - 10:00 (20 min)	Opening Addresses	(Taiwan) Dr. Chien-Jo	istry of Health and Welfare, R.O.C.	
10:00 - 10:15 (15 min)	Group Photo			
Keynote Speeches Main Hall (Room 1101)				
10:15 - 10:20 (5 min) Moderator: Li-Feng Lee, Deputy Minister, Ministry of Health and Welfare, R.O.C. (Taiwan)				
10:20 - 10:40 (20 min)	COVID-19 and Safer Future - Lessons and Challenges of the Global Health		Prof. Ganglip Kim, Professor, Yonsei University, Republic of Korea	
10:40 - 11:00 (20 min)	(Re)thinking Research for Tackling Global Health Problems and Solutions		Prof. Jozef Suvada, Professor, St. Elizabeth University of Public Health and Social Science (Slovakia), McMaster University (Canada), Scranton University (US), St. Jude Research Children Hospital (US)	

11:00 - 11:20 (20 min)	Call to Action for Implementati and Integration of Climate Med into Continuum of Medical Edu Curriculum	licine	Prof. Jung Yul Park, Chair of Council, World Medical Association (WMA)	
11:20 - 13:30 (130 min)	Lunch Break			
Plenary 1: Partnership and Networking in Global Health Governance Main Hall (Room 1101)				
13:30 - 13:35 (5 min)	Moderator: Prof. Kung-Yee Liang , Academician, Academia Sinica, R.O.C. (Taiwan)			
13:35 - 13:50 (15 min)	Tackling Threats and Challenges of Modern Welfare Systems of Well- Being and Solidarity		Dr. Clemens Martin Auer, President, European Health Forum Gastein	
13:50 - 14:05 (15 min)	Human Rights Challenges in Global Health Governance: Advancing Human Rights in Ongoing Global Health Law Reforms		Prof. Benjamin Mason Meier, Professor, Global Health Policy, University of North Carolina at Chapel Hill, United States of America	
14:05 - 14:20 (15 min)	One Health, One World: Structures for Survival in a Dangerous World		Prof. Martin McKee, Professor, European Public Health, London School of Hygiene & Tropical Medicine, United Kingdom	
14:20 - 14:35 (15 min)	Partnership for Innovations to Fight Infectious Diseases and Leave No One Behind		Dr. Osamu Kunii, CEO, Global Health Innovative Technology (GHIT) Fund	
14:35 - 15:00 (25 min)	Panel Discussion			
15:00 - 15:20 (20 min)	Coffee Break			
Parallel Session 1: Clobal Health Security: Tele		Tolod	Parallel Session 2: ledentistry in Asia Pacific Countries -	

Global Health Security: To Build Sustainable Preparedness for and Response to the Next Pandemic [Taiwan Centers for Disease Control] Room 1001 Parallel Session 2: Teledentistry in Asia Pacific Countries -A Sustainable Solution to Oral Health for All [Department of Oral Health] Main Hall (Room 1101)

15:20 - 15:25 (5 min)	Moderator: Dr. Jen-Hsiang Chuang , Director-General, Centers for Disease Control, Ministry of Health and Welfare, R.O.C. (Taiwan)	15:20 - 15:30 (10 min)	Moderator: Prof. Eddie Hsiang-Hua Lai, Director-General, Department of Oral Health, Ministry of Health and Welfare, R.O.C. (Taiwan)
15:25 - 15:45 (20 min)	The Experiences of COVID-19 and Future Challenges for Infectious Disease Control in Japan Dr. Nobuhiko Okabe , Director General, Kawasaki City Institute for Public Health, Japan	15:30 - 15:45 (15 min)	The Digital Transformation in Health Care and Education Setting Prof. Guang Hong , Vice-Dean, Graduate School of Dentistry, Tohoku University, Japan
15:45 - 16:05 (20 min)	Investing in the Future: Reframing the Cost of Pandemic Preparedness Mr. Matthew P. Shearer , Senior Associate Researcher, Johns Hopkins Center for Health Security, Bloomberg School of Public Health, United States of America	15:45 - 16:00 (15 min)	Journey Towards Promoting Teledentistry: Building the Competencies in Undergraduate Programme Prof. Liang Lin Seow , Dean, School of Dentistry, International Medical University, Malaysia
16:05 - 16:25 (20 min)	Taiwan's Experience in the Fight with COVID-19 Dr. Chin-Hui Yang , Director, Division of Acute Infectious Diseases, Centers for Disease Control, Ministry of Health and Welfare, R.O.C. (Taiwan)	16:00 - 16:15 (15 min)	Quality Assurance of Dental Education in Post- COVID On-line Learning Environment: Cases in Korea Prof. Jae-Sung Kwon , Assistant Professor and Chair,
16:25 - 16:45 (20 min)	One Health and One Digital Health to Prevent Emerging Infectious Diseases: COVID-19 Pandemic Illustrations Prof. Hsiu-Hsi Chen , Professor, Institute of Epidemiology and Preventive Medicine, National Taiwan	(15 min) 16:15 - 16:25	Department and Research Institute of Dental Biomaterials and Bioengineering, Seoul, Republic of Korea
16:45 - 17:00 (15 min)	University, R.O.C. (Taiwan) Panel Discussion	(10 min) 16:25 - 17:00 (35 min)	Panel Discussion VR Experience
18:30	Welcome Banquet (by invitation)		

Day 2 - November 8th, Wednesday				
TIME	TOPICS		SPEAKERS	
9:00 - 10:00 (60 min)	Registration			
Plenary	Plenary 2: Utilization of Digital Technology in Global Health Governance Main Hall (Room 1101)			
10:00 - 10:05 (5 min)	Moderator: Dr. Chung-Liang Shih , Director General, National Health Insurance Administration, Ministry of Health and Welfare, R.O.C. (Taiwan)			
10:05 - 10:20 (15 min)	Rethinking Global Health Governance in the Age of Digital Health		Dr. Piya Hanvoravongchai, Secretary General, Thai National Health Foundation	
10:20 - 10:35 (15 min)	Digital Governance of Smart Healthcare		Prof. Min-Huei (Marc) Hsu, Chief Data Officer, Office of Data Science, Taipei Medical University, R.O.C. (Taiwan)	
10:35 - 10:50 (15 min)	Digital Global Health Governance Across Borders and Cultures		Prof. Teng Liaw, Emeritus Professor, University of New South Wales, Australia	
10:50 - 11:00 (10 min)	Panel Discussion			
11:00 - 13:30 (150 min)	Lunch Break Mini		sterial Roundtable (by invitation)	
Resilience a in Te	Parallel Session 3: Resilience and Mental Health Promotion in Teens and Young Adults [Department of Mental Health] Room 1001		Parallel Session 4: Autonomy, Independence, and Friendly Living in an Aging Society [Social and Family Affairs Administration] Main Hall (Room 1101)	
Moderator:	Moderator:		Moderator:	

Moderator:	Moderator:
Dr. Lian-Yu Chen,	Dr. Tsung-Hsi Fu,
Director General, Department of Mental Health,	Associate Professor, Department of Social Work,
Ministry of Health and Welfare, R.O.C. (Taiwan)	National Taiwan University, R.O.C. (Taiwan)

2023 Global Health and Welfare Forum in Taiwan

13:30 - 13:50 (20 min)	Substance Use and Problems among Young People in Taiwan: Evolution and Predictors in the Context of the Family, School, and Community Prof. Chuan-Yu Chen , Professor, Institute of Public Health, National Yang Ming Chiao Tung University, R.O.C. (Taiwan)	13:30 - 13:50 (20 min)	The Symbiosis Community in Super-Aged Society Prof. Cheng-Hsiung Chen , Architect, Jason Architects & Associates; Associate Professor(R) of Chung Yuan Christian University, R.O.C. (Taiwan)
13:50 - 14:10 (20 min)	Recent Trends in Youth Suicide and Potential Influencing Factors in Taiwan: Implications for Prevention Strategies Prof. Shu-Sen Chang , Professor and Director, Institute of Health Behaviors and Community Sciences, College of Public Health, National Taiwan University, R.O.C. (Taiwan)	13:50 - 14:10 (20 min)	EN-GAWA (縁側) Service 2.0: A Mechanism to Connect All Kinds of People to the Local Community Prof. Naohiko Hayata , Professor, Faculty of Information Media, Hokkaido Information University, Japan
14:10 - 14:30 (20 min)	Recreational Cannabis Use and Medical Cannabis: What We Have Learned Prof. Eric C. Strain , Director, Behavioral Pharmacology Research Unit, Johns Hopkins University School of Medicine, United States of America	14:10 - 14:30 (20 min)	Japanese Trends in Elderly Care Facility Planning and Creating Environments for Dementia Prof. Satoshi Ishii , Dean of Faculty of Architecture; Vice President, Tohoku Institute of Technology, Japan
14:30 - 14:50 (20 min)	Improving Parenting of Teens to Prevent Mental Health Problems Prof. Anthony Jorm , Emeritus Professor, University of Melbourne; Medical Research Council (NHMRC) Leadership Fellow, Australia	14:30 - 14:50 (20 min)	Ubiquitous Exergame for the Elderly- A Tongue-Training Case Study Prof. Ko-Chiu Wu , Professor and Dean, College of Design, National Taipei University of Technology, R.O.C. (Taiwan)
14:50 - 15:10 (20 min)	Panel Discussion	14:50 - 15:10 (20 min)	Panel Discussion
15:10 - 15:30 (20 min)	Coffee Break		

Plenary 3: Challenge of Global Health Governance Main Hall (Room 1101)			
15:30 - 15:35 (5 min)	Moderator: Dr. Wui-Chiang Lee , Deputy Superintendent, Taipei Veterans General Hospital, R.O.C. (Taiwan)		
15:35 - 15:50 (15 min)	Why Gender Matters in Global Health Governance	Prof. Padmini Murthy , Professor and Global Health Director, New York Medical College School of Health Sciences and Practice, United States of America	
15:50 - 16:05 (15 min)	Challenge of Global Health Governance: Future Challenges in Pandemic Management	Dr. Sura Wisedsak , Director-General, Department of Health Service Support, Ministry of Public Health, Steering Group Member, Global Health Security Agenda (GHSA), Thailand	
16:05 - 16:20 (15 min)	Promoting Forward Thinking Leadership	Mr. Ronald Lavater , Chief Executive Officer, International Hospital Federation (IHF)	
16:20 - 16:35 (15 min)	Global Health: A Geopolitical Challenge?	Prof. Bettina Borisch , Executive Director, World Federation of Public Health Associations (WFPHA)	
16:35 - 16:45 (10 min)	Panel Discussion		
16:45 - 17:10 (25 min)	Closing Ceremony: Ministerial Joint Statement Closing Address: Dr. Jui-Yuan Hsueh, Minister, Ministry of Health and Welfare, R.O.C. (Taiwan)		

Opening Ceremony

OPENING PERFORMANCE

MOOZ

OPENING ADDRESSES

Dr. Jui-Yuan Hsueh Minister, Ministry of Health and Welfare, R.O.C. (Taiwan)

- 13 -

Dr. Chien-Jen Chen Premier, Executive Yuan, R.O.C. (Taiwan)

OPENING PERFORMANCE



MOOZ

"Yueqin, Not only Yueqin." When it comes to Yueqin, What's Your Imagination?

Found in the Spring of 2019, MOOZ unites musicians from different fields, consisted of the Taiwanese native instrument Yueqin, singer and acoustic guitar, and is flexible to be adjusted to different occasions by using ruan, huqin or percussions to add different musical aromas.

Mooz's repertories, grounded on traditional operas, Taiwanese folk songs, Minan and Hakka ballads, present familiar melodies with new forms, breaking the stereotype of traditional operas and Taiwanese folk songs through collages of melodies, rearrangements of chords, variations of rhythms and elements of pop music to promote Taiwanese native music to more people.

OPENING ADDRESSES

Jui-Yuan Hsueh

- Minister, Ministry of Health and Welfare, R.O.C. (Taiwan)



Dr. Jui-Yuan Hsueh is the current Minister of Health and Welfare, Republic of China (Taiwan) and has held the position since July 2022.

Dr. Hsueh started his career in the Department of Health (currently the Ministry of Health and Welfare) as Senior Secretary of the Bureau of Medical Affairs in 2002. He became the Deputy Director-General of the Bureau in 2003 and Director-General in 2004. He served as Deputy Superintendent of the Shuang Ho Hospital in 2008 and Director of Public Health Bureau, Pingtung County in 2015. Then, he re-joined and took the role as Vice Minister of Ministry of Health and Welfare in 2017 and Deputy Minister in 2020.

Dr. Hsueh is both a lawyer and a medical doctor specialized in obstetrics and gynecology and devoted legal expertise to public health policy and administration. The idea of childbirth relief mechanism he promoted was the basis of Taiwan's Childbirth Accident Emergency Relief Act. Passed in 2016, it was the first act in the world dedicated to ensuring protection of mothers, fetuses and newborns during childbirth. The mechanisms established through this act ensured that in the event of a childbirth accident, timely relief could be obtained, medical disputes could be reduced, the relationship between pregnant women and medical staff could be promoted, and women's reproductive health and safety could be improved.

Dr. Hsueh also has expertise in the integration of healthcare services, health insurance reform and long-term care. His excellent administrative capabilities were fully demonstrated during his tenure as the founding deputy superintendent of Shuang Ho Hospital. Through pragmatic and basic hospital management, Dr. Hsueh's efforts enabled Shuang Ho Hospital, a public hospital run by private sectors, to provide medical services that catered to the needs of patients. During his tenure as Director of Public Health Bureau of Pingtung County, Dr. Hsueh facilitated the establishment of branches of Kaohsiung Veterans General Hospital and E-Da Hospital in Pingtung. Concurrently, he encouraged doctors from hospitals to provide health services in remote health centers, and initiated the first policy for mobile pharmacists that delivered medicine to patients who lived alone and had limited mobility. He not only brought medical resources to these underserved groups but also set the foundation of quality services for long-term care.

Dr. Hsueh earned his Doctor of Medicine from Taipei Medical University and obtained his Bachelor and Master of Laws from National Taiwan University.

OPENING ADDRESSES

CHEN Chien-jen



Education

- · B.S., Department of Zoology, National Taiwan University (NTU) (1973)
- M.P.H., Graduate Institute of Public Health, NTU (1977)
- Sc.D., School of Hygiene and Public Health, Johns Hopkins University, USA (1982)

Experience

- Professor, College of Public Health, NTU (1986-2015)
- · Director, Graduate Institute of Public Health, NTU (1993-1994)
- Director, Graduate Institute of Epidemiology, NTU (1994-1997)
- Dean, College of Public Health, NTU (1999-2002)
- Deputy Minister, National Science Council (NSC) (2002-2003)
- Minister, Department of Health, Executive Yuan (2003-2005)
- Minister, NSC (2006-2008)
- Distinguished Research Fellow, Genomics Research Center, Academia Sinica (2006-2015)
- Vice President, Academia Sinica (2011-2015)
- Vice President, Republic of China (Taiwan) (2016-2020)
- Distinguished Research Fellow, Genomics Research Center, Academia Sinica (2020-2023)
- Premier, Executive Yuan (2023-)

Day 1 : November 7th, 2023 (Tuesday)

Keynote Speeches

MODERATOR

Li-Feng Lee

Deputy Minister, Ministry of Health and Welfare, R.O.C. (Taiwan)

SPEAKER

Prof. Ganglip Kim

Professor, Yonsei University, Republic of Korea

Prof. Jozef Suvada

Professor, St. Elizabeth University of Public Health and Social Science (Slovakia), McMaster University (Canada), Scranton University (US), St. Jude Research Children Hospital (US)

- 17 -

Prof. Jung Yul Park

Chair of Council, World Medical Association (WMA)

MODERATOR

Li-Feng Lee, LL.M.

- Deputy Minister of the Ministry of Health and Welfare, Republic of China (Taiwan)



Ms. Li-Feng Lee has been appointed as Deputy Minister of the Ministry of Health and Welfare, Republic of China (Taiwan) since August 2020.

Ms. Lee is a social activist dedicated to the child and adolescent issues. Before taking over as Deputy Minister, she served as Member of the 9th Legislators, Secretary-General of ECPAT Taiwan, Member of Executive Committee for East Asia of ECPAT International, Director of Taiwan Women's Link, Member of the Executive Yuan's Coordination Meeting for the Prevention of Human Trafficking, and Member of the Executive Yuan's Children and Youth Welfare and Rights Promotion Group. While serving as the Secretary-General of ECPAT Taiwan, Ms. Lee actively promoted the Human Trafficking Prevention Act that was passed in 2009, the Convention on the Rights of the Child that was passed in 2014, and the Child and Youth Sexual Exploitation Prevention Act that was amended in 2015. During her tenure as a legislator, Ms. Lee also promoted many social welfare bills, actively led in the establishment of the Child Rights League in the Legislative Yuan, gathered cross-party concerns, jointly safeguarded the rights and interests of children, and contributed to the child and adolescent welfare.

Ms. Lee obtained her bachelor's degree in sociology from Tunghai University and Master of Law from Soochow University.

SPEAKER

Prof. Ganglip Kim

- Professor, Yonsei University, Republic of Korea



Professor KIM, Ganglip entered public service in 1990 and has been with the Ministry of Health and Welfare for 30 years. He has served as Minister of Food Drug Safety (MFDS) and Vice Minister of Health and Welfare during the COVID 19 outbreak situation until 2022 before joining the Graduate School of Public Health, Yonsei University. During the Covid-19 outbreak period, he has led the Korean Government Coordination Team as a key member and has worked as a main daily briefer, which has produced strong impression both to the national and international societies.

During his service at the Ministry, Professor Kim has significantly contributed to the advancement of Korean healthcare sector through major policy reforms. He launched the National Health Insurance Service and improved its operational efficiency as a single-payer insurer by integrating previously separate insurance societies. He also led the growth of public pension in Korea by reforming the National Pension Scheme and developing innovative fund management plans. In the sphere of social welfare policy, he has also proven his exceptional capacity as a leader and expert. Under his leadership, welfare for persons with disabilities in Korea has been notably enhanced. Furthermore, Professor Kim has led the current administration's endeavor to reinforce social services and to develop the national strategy for achieving an inclusive welfare state.

Internationally, Professor Kim has led a variety of cross-border cooperation and advanced Korea's global standing in the health and welfare sectors. From 2020, he has served for the World Health Organization (WHO) as its Executive Board member. In 2021, he took a position of Vice Chair of the WHO Executive Board. During his service as Minister Counsellor at the Permanent Mission in Geneva (2012-2015), he oversaw Korea's role as Chair of the WHO Framework Convention on Tobacco Control (FCTC).

In 2015, Professor Kim served as Vice-Director of the Organizing Committee for the Highlevel Meeting on the Global Health Security Agenda (GHSA), an initiative launched to address infectious disease outbreaks, antimicrobial resistance, and bio-terrorism. In 2017, he assumed the chairmanship of the GHSA Steering Group, the equivalent of an executive board for the Global Health Security Agenda.

Professor Kim graduated from Yonsei University with a bachelor's degree in Sociology in 1989. In 1997, he earned his M.A. in Social Service Administration from the University of Chicago in Illinois, USA. In 2010, he received his Ph.D. in Public Health from Yonsei University Graduate School.

COVID-19 and Safer Future -Lessons and Challenges of the Global Health

Ganglip Kim

Professor, Yonsei University, Republic of Korea

The Covid-19 pandemic is the worst health threat since the Spain flu outbreak. By reviewing the Covid-19 pandemic, the world should prepare for the next pandemic.

Preparedness at the national, regional and global levels is crucial for protection from health risks. In the early stage of the Covid-19 outbreak, the Korean government could respond to the pandemic by strengthening its preparedness based on the Joint External Evaluation (JEE) after MERS outbreak in 2015.

Covid-19 has clearly shown the importance of international cooperation. Preparedness in each country can be achieved only through close collaboration among international societies. Prompt and transparent communication among health authorities coordinated by the WHO is crucial for responding to emerging diseases. National capacity to prevent, detect, and respond to health threats requires reliable international health communication. Close international collaboration to reduce gaps through objective evaluation is recommended for better preparedness against health risks.

During the Covid-19 pandemic, we realized the value of fair access to vaccines, therapeutic medicine, and essential devices. However, many of governments have struggled to secure the accessibility. In addition, organizational and financial reforms should be seriously discussed for a more responsive WHO for the next pandemic.

In order to protect human health and safety from future health threats, we should work on improving ourselves to overcome the challenges ahead of us. Every communicable disease cannot be appropriately tackled if any country is left behind. We will be safer from the next pandemic when all of us are ready for it. There are many countries in need of international support to strengthen their own capacity. Also, there are countries with resources to assist those countries in need. Based on the JEE result, each government could identify the gaps in achieving global standards.

By nature, health threats cannot be responded only by the health sector. We need close collaboration from relevant ministries and agencies. So far, we have made some progress in multi-sectoral cooperation. The Covid-19 has revealed that our further effort towards closer collaboration among relevant sectors, nationally and internationally, is critically essential.

WHO and its member governments have discussed an advanced legal and implementational framework for a safer future. Even though it seems to be a very difficult goal, we will face the same dilemma that we experienced during Covid-19 without overcoming this challenge. Without a fair and efficient framework for accessing essential resources and for prompt and transparent information sharing, we cannot adequately protect our people from the next pandemic.

SPEAKER

Prof. Jozef Suvada

- Professor, St. Elizabeth University of Public Health and Social Science (Slovakia), McMaster University (Canada), Scranton University (US), St. Jude Research Children Hospital (US)



Jozef Suvada, prof., MD., PhD., MPH, MBA, MHA, MSc. - Full professor, policy maker, traumatherapeut, public health worker, and physician with specialization in pediatrics, a pediatric oncologist and palliative care, infectious diseases, and tropical medicine. Faculty member at St. Elizabeth University of Public Health and Social Science (Slovak Republic), McMaster University (Canada), Makerere University (Uganda), Christian University (Uganda), WSM (Poland). Coordinator of studies in humanitarian, migration, global health, trauma (psychotrama), evidencebased methodology, and social determinants of health. He is a member if the global Clinical guidelines development team in the field of infectious diseases, childhood health, humanitarian (and emergencies), and migration health. Member of European Pediatric Association, SIOP-PODC (International Pediatric Society for Children Oncology and subgroup for global health), Cure4Kids (St. Jude's Hospital, US), TIRA (Trauma Inicidents Reduction Association), EMDRIA äEMDRpsychotherapeutic Association), MOCHA project (inequalities in the health of children and youth in EU, EPA), European and African HIV and AIDS Society, WHO Patient Safety and Clinical Guidelines and many other associations and societies. He is the acting director of the SPAY (Social Pathology Among Youth) platform and Health Initiatives Association. He advocates at the global governance level for a better, more equitable, and safer world, where no one is left behind.

(Re)thinking Research for Tackling Global Health Problems and Solutions

Jozef Suvada / prof. MD. Jozef Suvada, PhD., MPH, MBA, MSc, MHA St. Elizabeth University of Public Health and Social Science (Slovakia), McMaster University (Canada), Scranton University (US), St. Jude Research Children Hospital (US)

Treatment interventions and rigid health systems are not enough to reduce the population-level burden of disorders, demand for care, and specific phenomena such as migration, and trauma, not excluding either preparedness, and response to crises and emergencies, suggesting a public health approach to tackling the social, cultural, and methodological determinants of global health (GH).

It posed the question of how to ensure that research delivers real benefits to communities in the face of shocks such as pandemics and challenges such as rising inequalities, changing climate, and conflict and violence.

There are some observations from past and emerging global health challenges on how (re)thinking research can help to address GH needs.

Research systems, including data systems, need to become stronger; everywhere.

As key actors within research systems, researchers need not only the academic knowledge to do good, credible research, but also need to learn and develop their abilities to communicate, and to hone their health diplomacy skills to engage with governments who find themselves needing to balance multiple agendas, demands and needs from a variety of different interest groups

Complex challenges and new solutions can only be addressed through research that brings together multiple perspectives.

Different kinds of knowledge, evidence, and research are needed to help make progress when the magnitude of the problem is so great. The difficulties in responding to global threats demonstrate especially the importance of social science research. As we observe how the actions of communities are central to tackling the spread of the disease, we realize that understanding these actions and knowing how, when, and why they can adapt and change with the support of the right policies and support.

Researchers need to combine and integrate their approaches and methodologies according to the challenge and the context.

Some research is pressing, urgent, and critical, and researchers may be challenged to "answering yesterday's problems tomorrow", because good research can take time. There's real value in enlightenment through "slow thinking", particularly when considering future scenarios that do not simply paper over the cracks in societal foundations. We are going to need such research. But there is also a need to get powerful evidence into use as soon as possible. There are new opportunities to increase speed of understanding with using digital health tools, including AI. Here we are facing ethical and conceptual challenges. Strong research communication and engagement,

targeted and driven by audience needs, also help ensure that those who need data and evidence the most can access it, understand it, and use it. This approach would help to implement a set of clear recommendations on how to prevent the misuse of research based on new digital technologies such as AI.

Relationships are key to getting evidence into use.

These can be local, personal, and international; between researchers and governments, public servants, politicians, the media, civil society organizations, and communities – but they need to involve trust and a shared valuing of research and evidence. Ultimately it is often relationships that make a difference when achieving impact – moving from simply talking about change to transformations taking place.

Funders play a critical role in helping generate interdisciplinary, contextually-appropriate evidence and learning.

There are several ways in which funders can support research uptake and use e.g. Help to facilitate global access to local knowledge. Research users tend to get their evidence from the "usual suspects", etc.

In conclusion, the lecture on (re)thinking research in Global Health will explore different potentials for thinking about challenges and solutions.

SPEAKER

Jung Yul Park, M.D. Ph.D.

- Professor, Department of Neurosurgery & Medical Humanities, Korea University, College of Medicine

Educations:

Graduated from Korea University, College of Medicine (1985) Neurosurgical Residency, Korean University Medical Center(1990) Research Fellow at Neuroscience Center & Neurosurgery Specialist, Toronto University, Canada (1999-2000) OSCE Instructor Certification Program (1999, Canada) Online Course on Medical Informatics (2003, Stanford University) AMP (Advanced Management Program) of Korea Univ. School of Business (2007) & Seoul National University with the Korean Medical Association Certified Geriatric Care Specialist (Korea 2013, N0. 13-039) Subspecialty Board of Critical Care (2009, No.219) & Geriatric Medicine Specialist (2021)

Major Academic Positions & Activities (Current):

Chair, Council of World Medical Association (WMA: 2023-)
Vice President, Korean Medical Association (KMA:2018-)
Vice President, Korean Academy of Medical Sciences (KAMS: 2018-)
Director, Korean Authority for CME/CPD Implementation and Evaluation (2018-)
Senior Advisory Board member, World Directory of Medical School (WFME) (2018 -)
Councilor, Confederation of Medical Associations in Asia and Oceania (CMAAO) (2021-)
Chair, Korean Medical Practice Review Authority (2019-)
President, Korean Academy of Neurological Surgery (2023-2027)
Chairman, Reassessment Committee, National Evidence-based Collaborating Agency (NECA) (2018-)
Managing Vice President, Journal of KAMS & Advisor for Journal of KMA (2018-)
President, Academy for Geriatric Pain (2021-)
Organizing Chair, Annual Congress of Korean Medical Association (2018-2023)
Organizing Chair, Annual Meeting of Korean Academy of Medical Sciences (2021-2023)

Major Interests:

- 1. Functional Neurosurgery (esp., chronic pain research & treatment), Geriatric Medicine
- 2. Medical Education & Medical Informatics
- 3. Health Care Policy & Administration

Articles Published: 335



Call to Action for Implementation and Integration of Climate Medicine into Continuum of Medical Education Curriculum

Jung Yul Park, M.D.,Ph.D. Department of Neurosurgery and Medical Humanities Korea University College of Medicine

Climate change has become a global health crisis as we have started to live in a 'era of global boiling' after global warming period. Air pollution kills millions of people every year, while climate change causes more extreme weather conditions that may result or aggravate various medical conditions and spread of infectious diseases. The same emissions that cause global warming are responsible for more than one-quarter of deaths from heart attack, stroke, lung cancer and chronic respiratory disease. Leaders in both the public and private sectors must work together to clean up our air and mitigate the health impacts of climate change.

Although global organization such as WHO, UN, WMA, Health Care Without Harm, Lancet Countdown and Planetary Health Alliance and many leaders from both the public and private sectors worldwide are working together to fight against climate crisis there needs better and more robust preparation and innovative efforts to fight against health crisis as well prevention of its possible detrimental consequences.

In addition to recent efforts on implementation of various study modules to be incorporated into the preventive medicine and clinical curriculum in different levels of medical school years, author believes that there should be a separate and independent field of medicine, as a Climate Medicine, to be established and implemented to current specialties of medicine given the fact it is associated with wide ranges of scientific knowledges as well as contemporary understanding of biological and medical effects such as disorders related to extreme heat waves, wide varieties of zoonotic diseases, and newly shifting infectious disease patterns to mention a few. Integration and implementation of such new specialty needs to be introduced to all levels of medical education, from basic medical education, postgraduate education, and to continuing professional development (CPD) to be continuously updated, educated and appreciated to a life-long learning.

Here, the author will to address the up-to-dated basic and medical knowledge on extreme change in climates and will emphasize the impacts of climate changes on human health along with a need to call for action by physicians and healthcare professionals and especially the educators to grapple with crisis related to climate changes and to prevent future detrimental consequences by establishment and implementation of a lifelong learning curriculum and continuous professional development in medical and health professional fields.

Key Words: Climate Change, Education, Medical Curriculum, Implementation, Integration

2023 臺灣全球健康福祉論壇

Plenary 1:

Partnership and Networking in Global Health Governance

MODERATOR

Prof. Kung-Yee Liang

Academician, Academia Sinica, R.O.C. (Taiwan)

SPEAKER

Dr. Clemens Martin Auer

President, European Health Forum Gastein

Prof. Benjamin Mason Meier

Professor, Global Health Policy, University of North Carolina at Chapel Hill, United States of America

Prof. Martin McKee

Professor, European Public Health, London School of Hygiene & Tropical Medicine, United Kingdom

Dr. Osamu Kunii

CEO, Global Health Innovative Technology (GHIT) Fund

- 27 -

MODERATOR

Kung-Yee Liang

- Academician, Academia Sinica, R.O.C. (Taiwan)



Kung-Yee Liang received his Ph.D. in Biostatistics from University of Washington in 1982 and has been a faculty member at the Department of Biostatistics, Johns Hopkins University since then for twenty-eight years.

In August, 2010, Liang retired from Hopkins and became the sixth President of the National Yang-Ming University, the first medical university in Taiwan. In December, 2017, Liang stepped down from the post to become the sixth President of National Health Research Institutes (NHRI) and his primary appointment was with the Institute of Population Health Science.

In December 2022, Liang retired from NHRI and is now the Distinguished Chair Professor at Feng Chia University since February 2023, appointed at the Center of General Education.

Among the honors and awards, Liang received the **Snedecor Award** (with Scott Zeger) in 1987 by the American Statistical Association for best publication in biometry for 1986, the **Spiegelman Award** by the American Public Health Association in 1990 for outstanding accomplishments in the field of health statistics, the **Rema Lapouse** Award by the American Public Health Association in 2010 for significant contributions to the scientific understanding of the epidemiology and control of mental disorders, the **Karl Pearson Prize** (with Scott Zeger) in 2015 by the International Statistical Institute for contemporary research contribution that has had profound influence on statistical theory, methodology, practice, and/or applications, and the **Heritage Award** in 2016 by the Johns Hopkins Alumni Association for outstanding service to the progress of the University over an extended period of time.

Liang is an Elected Fellow of the American Statistical Association in 1995, an Elected Academician, Academia Sinica, Taiwan in 2002, an Elected Member, Academy of Sciences for the Developing World (TWAS) in 2012, an Elected Member, the National Academy of Medicine, USA in 2015 and an Elected Member, Johns Hopkins Society of Scholars in 2016. In 2020, Liang was one of the 50 alumni from around the world recognized as changemakers for their distinguished service and achievement across public health disciplines and settings in celebration of University of Washington (UW) School of Public Health's 50th anniversary.

Liang's research interest has primarily been on developing new statistical methods for analyzing

correlated data derived from longitudinal and genetic epidemiological studies, and on developing statistical theory for inference in the presence of nuisance parameters. Liang is a co-author of the book on "Analysis of Longitudinal Data", published by the Oxford University Press in 1994 and in 2002 (2nd edition). He is also the author of the monography on "Generalized Linear Models, Estimating Equations and Multivariate Extensions", published by the Institute of Statistical Science, Academia Sinica in 1999, as a part of the Invited Lecture Series in Statistical Science.

SPEAKER

Clemens Martin Auer

- President, European Health Forum Gastein



Clemens Martin Auer started his career as Austria's leading civil servant in the public health system in March 2003 as chief of staff of then Federal Minister of Health Maria Rauch-Kallat. From September 2005 to 2018, he was the director general of the Ministry of Health, responsible for the Austrian health system (care planning, financing, quality, and digitization) and international affairs (EU, WHO, OECD, UN) as well as for the oversight of the Public Health and Food Authority (AGES). As the managing director of the Federal Health Agency and chair of the Standing Coordination Committee (2005 to 2018), he was responsible, inter alia, for the overall planning of the public health care system and hospital financing by the Republic of Austria, with an overall annual budget of almost 30 billion euros.

Since 2003, he has played a central role in all major health reform measures in Austria, including the reimbursement system for medicines (reimbursement code), the establishment of a new market authorization agency for medicines, and a new national public health research institute (Gesundheit-Österreich), numerous reforms in the area of social health insurance, the introduction of the Austrian Structural Plan for Health Care, new transparency measures in financing, quality assurance systems, the health target management system, and the Primary Health Care Reform Act in Austria.

One of the focal points of the strategic work concentrated on eHealth, the introduction of the Electronic Health Act (ELGA) in Austria. From 2012 to 2016, he was the co-chair of the eHealth Network of the competent authorities within the European Union and coordinator of the various joint actions within the EU.

From 2018 onwards, Auer was the Special Envoy for Health of the Ministry of Health, from 2019 to 2022 a member and vice chair of the Executive Board of the World Health Organization (WHO) in Geneva. In 2020 and 2021, during the COVID-19 pandemic crisis, he was a lead national coordinator in Austria, and the co-chair of the Joint Procurement Board for the vaccines for 450 million EU citizens.

On reaching the age of 65, he retired from his positions in the Ministry of Health in June 2022.

He was a member of the Advisory Board of the European Forum Alpbach, the Board of the European Observatories, and numerous high-level working formats of the European Union, the WHO, OECD, etc.

Since 2017, Auer has been the president of the European Health Forum Gastein. In 2022 he took on a position as WHO EURO representative in the Advisory Board of the WHO Kobe Centre for Health Development, in Kobe, Japan.

Tackling Threats and Challenges of Modern Welfare Systems of Well-Being and Solidarity

Clemens Martin Auer President, European Health Forum Gastein

The development of the modern welfare state is a prerequisite for allowing people to share in the progress of science and medicine through public healthcare systems. But this does not necessarily happen as a matter of course. Modern welfare states are coming under tremendous pressure in the permacrisis we face in politics, the economy, society and the climate. This situation poses a political challenge extending far beyond the usual debate on healthcare policy. A debate must now ensue on how to safeguard sustainable funding for solidarity and healthcare systems. The democratic debate demands that a balance be struck between the various types of constantly growing governmental functions and the public spending associated with them, on the one hand, and ways of raising the financial resources needed to pay for them, on the other.

It is also a prerequisite for allowing people to share in the enormous scientific progress made in medicine through well-developed public healthcare systems. But this does not necessarily happen as a matter of course. Modern welfare states are coming under tremendous pressure in the permacrisis we face in politics, the economy, society and the climate. This situation poses a political challenge extending far beyond the usual debate on healthcare policy.

The great strides which have been made in enforcing justice are embodied in the codes of social law passed by parliaments over the past century. The welfare state in the Western tradition establishes social justice in the form of programs that provide social security and stability not as appellative charity but as codified law. Basically speaking, these are social rights, claimable rights and benefits in the major areas of healthcare, old age, family, education and unemployment. The code of social law provides a central lever for, in theory at least, providing equity of access and a fair share in the overall economic performance of a society and for combating poverty.

SPEAKER

Benjamin Mason Meier

- Professor, Global Health Policy, University of North Carolina at Chapel Hill, United States of America



Benjamin Mason Meier is a Professor of Global Health Policy at the University of North Carolina at Chapel Hill. Through a joint appointment between the University of North Carolina's Department of Public Policy and Gillings School of Global Public Health, Dr. Meier's interdisciplinary research—at the intersection of global health, international law, and public policy—examines rights-based approaches to global health.

Framing the field of global health law, his seminal scholarship over the past two decades has led to over one hundred articles and chapters on the development, evolution, and application of human rights law in global health governance. His recent global health governance volume, Human Rights in Global Health: Rights-Based Governance in a Globalizing World (Oxford 2018), examines the influence of human rights across the public health policies of the United Nations. Drawing from this comparative analysis of international organizations, Dr. Meier has developed an academic textbook for the field of health and human rights, Foundations of Global Health & Human Rights (Oxford 2020). To advance legal scholarship on contemporary global health challenges, he recently launched a quarterly column on Global Health Law in the Journal of Law, Medicine & Ethics and published a foundational text on Global Health Law & Policy: Realizing Justice for a Healthier World (Oxford 2023).

This engaged research has been central to legal advancements in the COVID-19 response, supporting human rights analysis of national pandemic responses and global health law reforms through the World Health Organization. As a contributor to the development of rights-based global health policy, Dr. Meier serves as the Chair of the Global Health Law Consortium, as a Senior Scholar at Georgetown University's O'Neill Institute for National and Global Health Law, as the Founding Chair of the American Public Health Association's Human Rights Forum, and as a consultant to international organizations, national governments, and nongovernmental organizations. Supporting the next generation of the field, Professor Meier teaches core courses on Health & Human Rights and Global Health Policy, provides human rights trainings to students and policymakers across countries, and has recently established a Global Health Law Summer School to bring together students throughout the world to advance legal studies on global health.

Dr. Meier received his B.A. in Biochemistry from Cornell University, his J.D. and LL.M. in International and Comparative Law from Cornell Law School, and his Ph.D. in Sociomedical Sciences from Columbia University.

Human Rights Challenges in Global Health Governance: Advancing Human Rights in Ongoing Global Health Law Reforms

Benjamin Mason Meier JD, LLM, PhD, University of North Carolina at Chapel Hill

Human rights are central to global health, yet human rights limitations in the COVID-19 response have revealed the need to strengthen human rights obligations under global health law. With human rights serving as a foundational pillar of the United Nations (UN), states have come together over the past seventy-five years to advance public health obligations under international human rights law. Following from the development of health-related human rights under international law, the UN shifted to mainstream human rights throughout global health governance. The World Health Organization (WHO) has sought to mainstream human rights across its policies, programs, and practices, drawing from its rights-based response to HIV/AIDS to recognize the linkages between human rights protection and public health promotion. However, the challenges of the COVID-19 response have weakened these foundations of human rights in global health.

The COVID-19 pandemic exposed the limits of international legal obligations, with wideranging human rights violations impacting vulnerable populations, revealing inequities in global governance, and weakening the pandemic response. International guidance from global health and human rights institutions was often neglected in national responses, as seen where governments imposed discriminatory travel restrictions, digital contact-tracing violated individual privacy, and lockdown policies limited access to healthcare, education, food, and other determinants of health. Human rights challenges persisted amid innovations in COVID-19 vaccines and treatments, with the international community failing to meet international human rights obligations to fairly distribute these medical countermeasures. Such violative state actions impaired the pandemic response, limiting global solidarity in facing a common threat and raising an imperative to strengthen human rights obligations in global health law reforms.

This is a pivotal moment in the global governance response, with twin global health law reforms being undertaken by WHO member states – amending the International Health Regulations and developing a new Pandemic Accord. These reforms provide a crucial opportunity to advance human rights in global health governance, addressing human rights limitations in the COVID-19 response and establishing human rights principles in public health emergencies. To avoid the abandonment of human rights in facing future pandemic threats, there is a need to mainstream obligations relating to the right to health, the human rights that underlie public health, and international assistance and cooperation. Harmonizing human rights law and global health law, these reforms provide a necessary basis to strengthen the foundations of human rights in pandemic prevention, preparedness, and response and ensure justice in meeting future global health challenges.

SPEAKER

Prof. Martin McKee

- Professor, European Public Health, London School of Hygiene & Tropical Medicine, United Kingdom



Martin McKee qualified in medicine in Belfast, Northern Ireland, with subsequent training in internal medicine and public health. He is Professor of European Public Health at the London School of Hygiene and Tropical Medicine where he recently stood down as Medical Director. He is also Research Director of the European Observatory on Health Systems and Policies, a unique partnership of universities, national and regional governments, and international agencies. He has published almost 1,500 scientific papers, 50 books, and 130 book chapters, with a h-index of 175. He is Past President of the European Public Health Association, British Medical Association, and UK Society for Social Medicine, and served as an editor of the European Journal of Public Health for 15 years (six as editor in chief). He has sat on advisory boards in Europe and North America, in both the public and private sectors, including the European Commission's Expert Panel on Investing in Health. He was a Commissioner and Chair of the Scientific Advisory Board for the 2020/21 Pan European Commission on Health and Sustainable Development (chair Mario Monti) and is a former chair of the WHO's European Advisory Committee on Health Research and of the Global Health Advisory Committee of the Open Societies Foundations, based in New York. He is a Fellow of the Royal Colleges of Physicians of London, Edinburgh and Ireland, the Royal College of General Practitioners, and the UK Faculty of Public Health. His contributions to European health policy have been recognised by, among others, election to the UK Academy of Medical Sciences, Academia Europaea, and the US National Academy of Medicine, by the award of honorary doctorates from Hungary, Israel, The Netherlands, Greece, Sweden (Karlstad University & Nordic School of Public Health), and the UK and visiting professorships at the Universities of Zagreb and Belgrade, the London School of Economics, and the Taipei Medical University, as well as appointment as a distinguished international scholar at the University of Pennsylvania and McMaster University, Canada. In 2003 he was awarded the Andrija Stampar medal for contributions to European public health, in 2014 the Alwyn Smith Prize for outstanding contributions to the health of the population, and in 2015 the Donabedian International Award for contributions to quality of care. In 2005 was made a Commander of the Order of the British Empire (CBE) by HM Queen Elizabeth II. He has an active following on Twitter as @martinmckee.
One Health, One World: Structures for Survival in a Dangerous World

Martin McKee

Professor, European Public Health, London School of Hygiene & Tropical Medicine, United Kingdom

The COVID-19 pandemic was a reminder of the profound challenges facing our world. A virus newly emerging in China spread across the world in weeks, bringing international ravel and commerce to a virtual health. But a pandemic is only one of many possible threats to our planet and our species. Conflict, climate change, and cyberattacks are only some of the many risks that we must prepare for. And if we are to prepare for these risks we must work across international borders, wither at a regional or a global level. The question, and one that is especially relevant for Taiwan, is whether our existing structures are fit for purpose?

This talk will begin with a brief discussion of global health, the "health issues whose causes or redress lie outside the capability of any one nation state". It will examine the ways in which it is conceptualized in different settings, as foreign policy, security, charity, investment, or public health. It will describe briefly how it has, only relatively recently, risen on the agenda of international bodies like the G7, G20, and United Nations.

Next it will offer a brief review of what went wrong during the pandemic and the lessons we can learn. In particular, it will argue that we need not only technical capacity but political leadership, preparedness and agility when a crisis arises, and solidarity rather than division.

Finally, it will present a framework for thinking about future threats. At its heart lies the concept of One Health, the complex interrelationship between human, animal, and environmental health, all co-existing with an incredibly diverse, and constantly evolving population of microorganisms, ever ready to seize the opportunities we create for them. These are, in turn, subject to threats to our planet (including natural, such as earthquakes, asteroids, and volcanoes) and man made (such as climate change, environmental degradation, and threats to food supplies and infrastructure). The framework also examines the many issues that can either exacerbate these risks or mitigate them, ranging from conflict to digital access to trust.

It will conclude with a discussion of whether the existing international structures are able to minimize the risks and respond should they become a reality, recognizing the challenges that exist in an increasingly fragmented international system in which populist politics in some countries threaten the limited safeguards that do exist.

Osamu Kunii

- CEO, Global Health Innovative Technology (GHIT) Fund



Dr. Osamu Kunii is the Chief Executive Officer of the Global Health Innovative Technology Fund. In his early career, he participated in the medical team for the hostage crisis at the official residence of the Peruvian ambassador, the emergency relief and investigation of Indonesian forest fires, Bangladesh tornado disasters and flood disasters, Afghan refugees, hospital projects in Mozambique, India, etc. Moreover, he worked on measures and surveys on infectious diseases such as Ebola fever and AIDS in Gabon and Côte d'Ivoire, community health and maternal and child health projects in Indonesia and Nicaragua, etc. Prior to hold this position, Dr. Osamu Kunii served as a Management Executive Committee member of the Global Fund to Fight AIDS, Tuberculosis and Malaria, as Head of the Strategy, Investment, and Impact Division. He worked, also, as a Global Health professional in the field of infectious diseases, maternal and child health and focused his job on the humanitarian aid sector to ensure the access to healthcare technologies for underserved populations in over 130 Low- and Middle-income countries.

Partnership for Innovations to Fight Infectious Diseases and Leave No One Behind

Dr. Osamu Kunii

CEO, Global Health Innovative Technology (GHIT) Fund

The COVID-19 pandemic has left a lot of lessons to the world, which is now making efforts to future pandemic prevention, preparedness and response (PPPR). One of the world's efforts in PPPR is to implement and achieve the 100 Days Mission (100DM), which is an ambitious target to make available medical countermeasures (MCM) like diagnostics, therapeutics and vaccines within 100 days after a future pandemic starts or a public health emergency of international concerns (PHEIC) declares. To make this happen, the world needs global collaboration and partnership.

In addition to future pandemic, we should not forget the ongoing epidemics and endemics. The same level of infections and deaths as the annual average of those due to COVID-19 are taking place due to tuberculosis, malaria and neglected tropical diseases (NTDs) in total. This fact is not recognized well in the world mainly because those infections disproportionately affect low- and-middle- income countries but not high income countries. That is why many people in need of prevention and treatment of various infectious diseases are still left behind.

In my presentation I will explain 100DM for PPPR, public private partnership to fight infectious diseases, and the need to pay more attention and develop strategies and approaches to reach out to people left behind.

Parallel Session 1:

Global Health Security: To Build Sustainable Preparedness for and Response to the Next Pandemic

MODERATOR

Dr. Jen-Hsiang Chuang

Director-General, Centers for Disease Control, Ministry of Health and Welfare, R.O.C. (Taiwan)

SPEAKER

Dr. Nobuhiko Okabe

Director General, Kawasaki City Institute for Public Health, Japan

Mr. Matthew P. Shearer

Senior Associate Researcher, Johns Hopkins Center for Health Security, Bloomberg School of Public Health, United States of America

Dr. Chin-Hui Yang

Director, Division of Acute Infectious Diseases, Centers for Disease Control, Ministry of Health and Welfare, R.O.C. (Taiwan)

Prof. Hsiu-Hsi Chen

Professor, Institute of Epidemiology and Preventive Medicine, National Taiwan University, R.O.C. (Taiwan)

- 39 -

MODERATOR

Jen-Hsiang Chuang M.D., Ph.D.

- Director-General, Centers for Disease Control, Ministry of Health and Welfare, R.O.C. (Taiwan)



Educational Background

- 1985 1992 M.D., School of Medicine, National Yang-Ming University, R.O.C. (Taiwan)
- 1992 1994 M.S. in Public Health, National Yang-Ming University, R.O.C. (Taiwan)
- 1997 2003 Ph.D. in Biomedical Informatics, Columbia University, U.S.A.

Professional Career

- **1994 2002** Lecturer, Department of Social Medicine, National Yang-Ming University, R.O.C. (Taiwan)
- 2003 2005 Associate Professor, Institute of Health Informatics and Decision Making, School of Medicine, National Yang-Ming University, R.O.C. (Taiwan)
- · 2005 2013 Associate Researcher, Taiwan CDC
- · 2013 2023 Deputy Director-General, Taiwan CDC
- 2013 Director-General, Taiwan CDC

Publications (the latest five articles)

- Lee, L. H., Chuang, J. H., Wu, Y. C., Chen, W. N., Wu, J. S., Chang, C. M., Huang, E. W., & Liu, D. P. (2023). Factors Influencing the Effectiveness of Adopting Electronic Medical Record-Based Reporting Systems for Notifiable Disease Surveillance: A Quantitative Analysis. Journal of medical systems, 47(1), 70.
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- Cheng, H. Y., Wu, Y. C., Lin, M. H., Liu, Y. L., Tsai, Y. Y., Wu, J. H., ... & Chuang, J. H. (2020). Applying machine learning models with an ensemble approach for accurate real-time influenza forecasting in Taiwan: Development and validation study. Journal of medical Internet research, 22(8), e15394.

Nobuhiko Okabe, MD PhD

- Director General of Kawasaki City Institute for Public Health, Kawasaki, Japan



Education

• 1965 - 1971 Jikei University School of Medicine, Tokyo, Japan

Main Work and Research Experiences

- 2012 Director General of Kawasaki City Institute for Public Health, Kawasaki City, Kanagawa
- 2000 2012 Director of Infectious Disease Surveillance Center, National Institute of Infectious Disease.
- **1997 2000** Head of Infectious Disease Surveillance Center, National Institute of Infectious Disease. Tokyo
- 1994 1997 Associate Professor, Department of Pediatrics, Jikei University School of Medicine, Tokyo
- **1991 1994** Regional Adviser for Communicable Disease Control and Prevention, World Health Organization Western, Pacific Regional
- 1988 1990 Director, Department of Pediatrics, Kanagawa Nurse and Midwife College Hospital, Kanagawa
- · 1982 1988 Faculty, Pediatric Infectious Diseases, National Children's Hospital, Tokyo
- 1978 1980 Research Associate, Pediatric Infectious Diseases, Vanderbilt University School of Medicine, Nashville, Tennessee, USA
- 1973 1978 Clinical Associate, Department of Pediatrics, Jikei University School of Medicine, Tokyo

Academic Fields

- 2023 Councilor of Nihon University
- 2022 Advisor for Center for Infectious Disease Education and Research, Osaka University
- 2021 Visiting Professor of Kanagawa University of Human Services
- 2008 Visiting Professor of Infection Control, Kitasato University
- 2003 Visiting Professor of Pediatrics, Jikei University School of Medicine

Contribution for Medical Society

Bord member of Asian Society for Pediatric Infectious Diseases (ASPID) Bord member of Japanese Society of Travel Medicine, Honorary member of Japanese Society for Pediatric Infectious Diseases (JSPID),
Honorary member of Japanese Sexual Transmitted Diseases
Honorary member of Japanese Association for Infectious Diseases
Honorary member of Japanese Society of Vaccinology
Honorary member of Japanese Society of Travel Medicine
Honorary member of Japanese pediatric Society
Meritorious Member of Japanese Society for Infection Control and Prevention
Meritorious Member of Japanese Society for Neuroinfectious Diseases

Contribution for Government

Science Council (Infectious Disease Subcommittee Members) : termed National Measles and Rubella Elimination Certification Committee (Chairman), Pandemic Influenza Expert Committee (Co-Chairman): termed Expert Subcommittee on Novel Coronavirus Disease Control, Japanese Government: termed Special Advisor for the Cabinet on Infectious Disease Control: termed

Contribution for WHO:

Regional Polio Eradication Certificate Committee (RCC) of WHO/WPRO (Chairman), Regional Polio Eradication Certificate Committee (RCC) of WHO/SEARO, Global Polio Eradication Certificate Committee (GCC) of WHO/HQ, Many experiences as on Temporary Advisor and Consultant for the fields of infectious diseases and Immunization.

The Experiences of COVID-19 and Future Challenge for Infectious Disease Control in Japan

Nobuhiko OKABE, MD, PhD

Director General, Kawasaki City Institute for Public Health, Japan

In Japan, the first case of COVID-19 was detected on January 15, 2020, and it was classified as a "designated infectious disease" under the Infectious Diseases Control Law on January 28. In terms of society, it became widely known after the outbreak of COVID-19 patients on the Diamond Princess ship that entered Yokohama Port on February 3, but the number of cases in Japan from February to March was small. It was in a smoldering state. However, the number of cases gradually increased in the Kanto metropolitan area including Tokyo and Kanagawa and Kansai area including Osaka and Kobe, and on March 13, the Act on Special Measures against New Influenza, etc. was amended, and countermeasures against COVID-19, new infectious disease, had been implemented based on this law since then.

After that, in Japan, priority measures such as declaring a State of Emergency and Preventing the Disease Spreading were repeatedly implemented, and mRNA vaccination began on February 17, 2021, amid repeated mutations of virus strains, etc., 1) April-May 2020, 2) July-Sept 2020, 3) Nov 2020-Feb2021, 4) April-June 2021, 5) July-Sept 2021, 6) Jan -June 2022, 7) July-Oct 2022, 8) Nov 2022-Feb 2023, total eight waves of epidemics occurred. The number of infected people increased each time, with the number of infected people peaking in the so-called 7th wave and decreasing slightly in the 8th wave. The number of severe cases peaked in the 5th wave and decreased, and the CFR gradually declined over time, but the number of deaths peaked in the 8th wave. The majority of fatal cases were old age population.

On May 8, 2023, when the 8th wave was on the decline, the new coronavirus was classified as a Category 5 disease under the Infectious Diseases Control Law (influenza, measles, rubella HIV/ AIDS, acute encephalitis/encephalopathy bacterial meningitis etc. are classified as category 5).

As of May 8, 2023 (the last day of all notifications), the number of infected people in Japan is approximately 34 million, the number of deaths by COVID-19 is approximately 75,000, and the CFR is approximately 0.22%.

By year, the CFR was 1.48% in 2020, 1.00% in 2021, 0.14% in 2022, and slightly increase to 0.38% in 2023 up to May 8.

I would like to talk about the COVID-19 situation in Japan, its response, and future challenges.

Matthew P. Shearer

- Senior Associate Researcher, Johns Hopkins Center for Health Security, Bloomberg School of Public Health, United States of America



Matthew P. Shearer is an Associate Scholar at the Johns Hopkins Center for Health Security (JHCHS) and a Senior Research Associate in the Department of Environmental Health and Engineering at the Johns Hopkins Bloomberg School of Public Health. His primary interests include epidemic preparedness and response; global health security; and biological weapons nonproliferation. He contributes to a broad scope of JHCHS research projects, including numerous efforts during the COVID-19 pandemic, and he plays an integral part in developing and implementing JHCHS' pandemic tabletop exercises.

Mr. Shearer's domestic work focuses principally on outbreak and epidemic response policy and operations. As Project Manager for Outbreak Observatory he worked to disseminate firsthand operational lessons from outbreak and epidemic responses, including studies on hepatitis A, measles, mumps, and seasonal influenza. He also contributed to JHCHS studies on the US response to the 2013-16 West Africa Ebola epidemic, including high-level isolation units and monitoring and movement restriction policies; communications and operations for medical countermeasures; and nonpharmaceutical interventions for emerging outbreaks and epidemics.

Mr. Shearer also has a diverse international portfolio, including national-level public health and preparedness capacity; regional natural, accidental, and deliberate biological threats; and biological weapons nonproliferation policy. He supports JHCHS' Southeast Asia multilateral biosecurity dialogue, which convenes government and nongovernmental experts from Indonesia, Malaysia, the Philippines, Singapore, Thailand, and the United States to discuss ongoing and emerging regional biosecurity threats. He has also collaborated with Taiwan CDC on several efforts, including Taiwan's first Joint External Evaluation and an Outbreak Observatory study on operational lessons from Taiwan's annual seasonal influenza vaccination campaign. Mr. Shearer has provided support for the World Health Organization to identify key lessons and best practices from national COVID-19 responses and develop a tool to assess national-level deliberate biological and chemical incident preparedness and response capacities.

Mr. Shearer leads much of JHCHS' work on the Biological and Toxin Weapons Convention (BWC), including through the BWC Global Forum podcast, which aims to provide technical expertise on emerging and future biological capabilities, and research studies addressing BWC verification, Confidence-Building Measures, and other efforts to strengthen the treaty. He also supported the

BWC Implementation Support Unit in developing and hosting regional workshops for BWC states parties in the Association of Southeast Asian Nations (ASEAN).

Mr. Shearer earned a MPH in epidemiology from the University of Michigan in 2014 and a BS in aerospace engineering from the United States Naval Academy in 2007.

Investing in the Future: Reframing the Cost of Pandemic Preparedness

Matthew P. Shearer

Senior Associate Researcher, Johns Hopkins Center for Health Security, Bloomberg School of Public Health, United States of America

It goes without saying that the COVID-19 pandemic was a seminal event in global health security, and there are countless lessons—positive and negative—that we can learn and apply to future preparedness, response, recovery, and resilience efforts. Many of these lessons will address issues such as preparedness and response operations, research, medical countermeasures (MCM) availability, communication, and collaboration, and nearly all will grapple with challenges associated with limitations on available funding or other resources.

To some degree, we know the solutions necessary to improve pandemic preparedness, at least in the broader sense. The world needs improved public health and healthcare systems, integrated disease surveillance and forecasting networks, rapid MCM development and production capacity, strengthened international coordination and collaboration, and effective risk communication and community engagement programs. What these will look like in practice remains to be seen, but we generally know that, in the end, these are the capabilities and capacities we need to strengthen resilience to future health security threats, including pandemics. The real challenge is how we get there. To be certain, there are countless policy issues and gaps that need to be addressed, at all levels of government and society, but perhaps the biggest barrier to developing and implementing these solutions is the finite amount of available funding and other resources.

Governments and societies face a diverse array of competing interests and threats, with varying scope, severity, and urgency, and historically, public health—particularly, pandemic preparedness—has been overlooked, in favor of higher-priority issues with more immediate impacts. The reality of public health is that our successes are often invisible and our failures very public, which poses unique challenges in demonstrating the value of health security programs and arguing for additional resources. In order to effectively develop, implement, and maintain pandemic preparedness frameworks and capacities, we need to change the perception of health security funding. Framing pandemic preparedness funding as a cost will inevitably render it as a drain on limited resources in the minds of government officials and the public. Why spend money on something that may never happen, when it can be used to provide an immediate impact? Instead, characterizing pandemic preparedness as an investment in our future and emphasizing the long-term value and direct, concrete benefits to the public can build support for sustained, forward-looking funding that will enable us to establish and maintain robust resilience to future pandemic-level threats.

Chin-Hui Yang

- Director, Division of Acute Infectious Diseases, Taiwan Centers for Disease Control, R.O.C. (Taiwan)



Education

- · M.D., School of Medicine, Chung Shan Medical University
- Ph.D., School of Public Health, Taipei Medical University

Experiences

- 2015 Director, Division of Acute Infectious Disease, Taiwan Centers for Disease Control
- 2012 2015 Director, Division of Preparedness and Emerging Infectious Disease, Taiwan Centers for Disease Control
- 2008 2012 Director, Division of HIV/TB/STD, Taiwan Centers for Disease Control
- 2005 2007 Chief Medical Officer, Taiwan Centers for Disease Control
- 2001 2005 Chief, Section of Infectious Disease, Department of Internal Medicine, Taipei Municipal Jenai Hospital

Publication

- Su WJ, Chan K Arnold, Chuang JH, Yang CH. Risk of Myocarditis and Pericarditis Following Coronavirus Disease 2019 Messenger RNA Vaccination—A Nationwide Study. Journal of Microbiology Immunology and Infection 2023 Feb;56(5).DOI:10.1016/j.jmii.2023.01.016
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Taiwan's Experience in the Fight with COVID-19

Dr. Chin-Hui Yang

Director, Division of Acute Infectious Diseases, Centers for Disease Control, Ministry of Health and Welfare, R.O.C. (Taiwan)

SARS epidemic occurred in 2003 resulted in 346 cases with 73 deaths, accompanied with a property lost estimated around 1000 million US dollar in Taiwan. Consequently, some major system changes were made for the preparedness and response for emerging infectious diseases, such as centralized commanding system, national stockpile of PPE, etc. The experience lead Taiwan quickly respond to the COVID-19 pandemic.

There were 3 stages of Taiwan's COVID-19 prevention strategy. In the beginning, when the antivirals and vaccine were both unavailable, we implemented many non-pharmaceutical interventions e.g. quarantine, mask wearing, border control, to preventing the virus from entering the community and spreading, Taiwan has achieved a record of "zero confirmed cases" for 252 days in 2020. When the vaccine became available, we promote aggressive immunization program to improve the national vaccine coverage rate. Then the Omicron strain appeared, it had high transmission capability but mild symptoms and low fatality rate. We started the mitigation stage with the goal of reducing severe illness and death. Taiwan entered the pandemic in April 2022, and reopened the border in October 2022. Finally, COVID-19 de-escalated to endemic disease in May 1, 2023. There was no lockdown throughout the pandemic, strict restrictions like school closure were implemented for only 70 days, and economic growth largely unaffected.

There were several aspects need to be reviewed and refinement in the post-epidemic stage, e.g. Epidemic Intelligence, community epidemic prevention, healthcare System maintenance, etc. Taiwan CDC is working on an assessment report and prepare white paper for future pandemic. In closing, this pandemic reminded us that communicable diseases know no borders and no country can face alone. Taiwan will continue deepening cooperation with other countries to contain the pandemic as soon as possible and also to achieve Health for ALL.

Tony Hsiu-Hsi Chen, PhD

- Distinguished Professor, Institute of Epidemiology and Preventive Medicine, National Taiwan University



Present Position

Distinguished Professor, Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University, Taipei, Taiwan

Educational And Professional Qualifications

- **Ph.D.** in Biostatistics, Biostatistics Unit of Medical Research Council (MRC), Institute of Public Health, Cambridge University, UK1995
- **M.Phil.** in Biostatistics, Biostatistics Unit of Medical Research Council (MRC), Institute of Public Health, Cambridge University, UK1992

Professional Experience

- 2020 Associate Dean, CPH(CEPH accredited), National Taiwan University
- 2020 Director, MPH Program, National Taiwan University
- 2008 Coordinator, Center of Biostatistical Consultation, Graduate Institute of Epidemiology, College of Public Health (CPH), National Taiwan University (NTU), Taipei, Taiwan)
- 2003 Chairman, Department of Public Health, CPH, NTU)

Awards

- 1. Outstanding Research Award of Ministry of Science and Technology) 2018
- 2. Outstanding Research Award of National Science Council, 2011
- 3. Finnish Distinguished Professor (FIDIPRO), Academy of Finland, 2007-2009
- 4. Ching-Xing Medical Award, Ching-Xing Medical Science Culture and Education Foundation, ROC, 2003

Publications

Published over **450 academic articles** in peer-reviewed journals.

One Health and One Digital Health to Prevent Emerging Infectious Diseases: COVID-19 Pandemic Illustrations

Tony Hsiu-Hsi Chen

College of Public Health, National Taiwan University, Taiwan

Following a series of influenza pandemic evolving from 1918, COVId-19 Pandemic as of 2020 has again signaled global health risk of being susceptible to the surge of emerging infectious diseases. Such threats have been implicated in the complex interactions between human, animal, and ecosystems on the planet, from which one health (OH) framework is derived. Climate changes as a results of global warming have affected the transmission of various vectors across animal species, which further transmitted to the high risk populations who are exposed to infected animals and finally may result in human-to-human transmission particularly when a new pathogen mutant occur.

To prevent another pandemic of emerging infectious diseases like COVID-19 pandemic, in the future it is imperative to build up a unified surveillance system under the global framework of OH and to operationalize OH as one digital health (ODH). This talk will illustrate a series of applications using artificial intelligence and related digital technologies to all interactions between human, animal, and planet under the global framework of OH in order to have preparedness, response, and resilience to face emerging or re-emerging infectious diseases such as COVID-19 pandemic. Three dimensions will be highlighted. The first is pertaining to how to operationalize OH as ODH with emphasis on the state-of-the-art metaverse in OH using the digital twin approach. The second is related to how ODH can be achieved by providing a solution to achieve fair and equitable of sharing of benefit when using digital health. One of example is to build up federal data system. The third is to show how operationalizing OH as ODH fits in with the panorama of SDGs after COVID-19 pandemic.

Key Words: Emerging Infectious Disease; COVID-19 pandemic; One Health (OH); One Digital Health (ODH); Metaverse; Digital Twin Design

Parallel Session 2:

Teledentistry in Asia Pacific Countries - A Sustainable Solution to Oral Health for All

MODERATOR

Prof. Eddie Hsiang-Hua Lai

Director-General, Department of Oral Health, Ministry of Health and Welfare, R.O.C. (Taiwan)

SPEAKER

Prof. Guang Hong

Vice-Dean, Graduate School of Dentistry, Tohoku University, Japan

Prof. Liang Lin Seow

Dean, School of Dentistry, International Medical University, Malaysia

Prof. Jae-Sung Kwon

Assistant Professor and Chair, Department and Research Institute of Dental Biomaterials and Bioengineering, Seoul, Republic of Korea

- 51 -

MODERATOR

Prof. Eddie Hsiang-Hua Lai

- DDS, MS, PhD, MOrth, FDS RCSEd, FDTFEd, FDS RCPS(Glasg), FICD



- 1. Director-General, Department of Oral Health, Ministry of Health and Welfare, Taiwan
- 2. Associate Professor, School of Dentistry, National Taiwan University, Taiwan
- 3. President-elect, Asia Pacific Dental Federation
- 4. President-elect, Southeast Asia Association for Dental Education

Prof. Lai is current Director-General, Department of Oral Health in Ministry of Health and Welfare, Taiwan. He is also associate professor in Division of Orthodontics and Dentofacial Orthopedics in the National Taiwan University Hospital and international dental ambassador of The Royal College of Surgeon of Edinburgh. He has obtained his full academic and specialist training in Taiwan, including DDS, MS and PhD degrees and also Membership of Orthodontists, Fellow in Dental Surgery and Fellow in Dental Trainer of the Royal College of Surgeons of Edinburgh. He serves as a Board examination committee Chairman in Taiwan Board of Orthodontists, Board of Implantologists, Board of Family Dentistry and also Past President of Association of Family Dentistry, Association of Hospital Dentistry, Taiwan. His major research interest relies on the subjects of Orthodontic, Implantology, Biomechanics and Dental Education. He has published around 60 peer review articles in scientific journals, a few book chapters and over 300 conference / seminar papers focusing in those areas of interest. He has been awarded 22 grants as principal or co-investigator and has 10 teaching and learning prizes or awards including the hospitals and associations outstanding teaching award.

Guang HONG MD, DDS, PhD.

- Vice-Dean, Graduate School of Dentistry, Tohoku University
- Professor and Chair, Division for Globalization Initiative
- Guest Professor of Wuhan University School of Stomatology
- Visiting Professor of Airlangga University Faculty of Dental Medicine



Professor Guang Hong, MD., DDS., PhD (Dental Science) is a Vice-Dean of Graduate School of Dentistry, Tohoku University, and Professor and Chair of Division for Globalization Initiative, and Director of office of international affairs at the Liaison Center for Innovative Dentistry. Doctor Hong finished Ph.D. course at Hiroshima University Graduate School of Dentistry in 2003.

Currently, Doctor Hong is Executive board member of Japanese Society for Dental Materials and Devices, Associate Editor of Dental Materials Journal, Associate Editor of Japanese Dental Science Review, and Director of The Japan Denture Care Society. He also is Committee Member of International Standardization Accelerated Project Japanese Ministry of Economy, Trade and Industry and expert of ISO (International Organization for Standardization) and DIN (German Institute for Standardization).

His research is the elucidation of the rheology properties of dental materials, and development of functionality new dental materials and education system. At present, his research is mainly concerned with international standard institution; improvement and development of oral care and denture care materials, metal-free dental implant materials and development of dental materials and education system according to the Industry-Academia-Government collaboration. He published more than 80 paper to SCI journals. He received Tohoku University the Presidential Prize for Educational Excellence in 2019.

The Digital Transformation in Health Care and Education Setting

Guang HONG

Liaison Center for Innovative Dentistry, Graduate School of Dentistry, Tohoku University, Sendai, Miyagi 980-8575, Japan

Medical and Dental education is mainly composed of three parts, that is Lectures, Simulation laboratory courses, and Clinical skill training. Among these, simulation laboratory course and clinical skill training is important parts of obtaining the basic skill to become a medical doctor and dentist. Especially for clinical skill training in terms of Internship training which is the most important infrastructure of dental education.

Digital technology is a very useful tool in the educational setting and health care. Especially with the recent pandemic of COVID-19 and our society's shift to the new normal, digital technology have become indispensable in the health care and educational setting. How to achieve the balance between keep on learning progress for medical and dental students but not inducing spread out of infected cases is an important issue for medical and dental education. To fit the future demand, professional education should be preparing in advance to face the future challenge and digitalization wave. And also we should develop different advanced education programs and realized the digital transformation not only in education but also in health care.

This presentation will outline a digital transformation in health care and educational setting and share with you same examples of our efforts through an interdisciplinary and global approach in this area.

Keywords: dental education, digital transformation, health care, biocompatibility, osseointegration

Dr. Seow Liang Lin

- Dean, School of Dentistry, International Medical University, Malaysia



Prof. Dr. Seow is currently the Dean for the School of Dentistry at the International Medical University, Kuala Lumpur and has previously served as academic staff in University of Malaya for ten years. She received her postgraduate training in prosthodontics from the Eastman Dental Institute (MSc) and University of Manchester (PhD-split site programme). Prof. Dr. Seow is actively involved in continuing professional programmes to share her knowledge and experience with fellow colleagues; she has conducted workshops and lectured widely at various regional and international conferences. Her areas of interest include fixed prosthodontics, aesthetics, adhesive dentistry, direct composite restorations, cariology and dental education. She has also been actively involved in research and has won numerous awards at international arena namely the Gold Medal and Best Oral Presentation at the 20th Anniversary CEREC Symposium, the Best Poster Presentation at The FDI World Congress, the Best Oral Presentation at the Asian Academy of Prosthodontics Congress, 2nd prize and special prize at the Singapore IDEM 2008 and 2010 respectively, Travel Award at the 12th International Association for Dental Research (IADR, SEA Division) Scientific Meeting and 2nd Prize in Oral Presentation at 18th MDA/FDI International Scientific Conference, Best Oral Presentation at the 30th Annual Scientific Conference of South East Asian Association of Dental Education (SEAADE), Best Oral Presentation at the 13th International Medical Conference (IMEC). She has obtained numerous research grants and published extensively in peer review journals.

She is responsible to drive the postgraduate programmes at the International Medical University, successfully rolled out the PG Diploma programmes in Implant Dentistry, Prosthodontics and Endodontics. She is the Founding President of Malaysian Association for Prosthodontics and Past President of the Asian Academy of Prosthodontics. She was the Honorary Publication Secretary for Malaysian Dental Association for three consecutive terms (2007-2010) and had held the position of secretary and council member of the International Association for Dental Research (Malaysian Section). She is an appointed member of the Malaysian Dental Council by the Minister of Health, Malaysia. She is also the Council Member for the Malaysian Association for Aesthetic Dentistry. Prof Seow is an appointed examiner for the MFDS examination of the Royal College of Surgeons of Edinburgh.

Journey Towards Promoting Teledentistry: Building the Competencies in Undergraduate Programme

Prof. Liang Lin Seow

Dean, School of Dentistry, International Medical University, Malaysia

The initial concept of teledentistry was mooted at a 1989 conference funded by the Westinghouse Electronics Systems Group in Baltimore. Discussion then was focused on strategies to apply dental informatics in dental practice to directly affect the delivery of oral healthcare, enabling delivery of partial or complete management at distance of thousands of kilometers away from the healthcare centers or qualified dental practitioners. Fast forward to 3 decades later, with advances made in the field of dentistry in terms of use of computers, telecommunication technology, digital diagnostic imaging services, devices and software for analysis and follow-up, teledentistry has been practiced in many countries. Teledentistry has the ability to improve access to oral health care, improve the delivery of oral healthcare and lower its costs. It also has the potential to eliminate the disparities in oral healthcare between rural and urban communities. The use of teledentistry for specialist consultations, diagnosis, treatment planning and coordination, and continuity of care will provide aspects of decision support and facilitate a sharing of the contextual knowledge of the patient among dentists. To prepare the next generation of dental practitioners who are prepared to accept teledentistry, this component of enabler in oral healthcare delivery must be embedded in the undergraduate dental programme. The incorporation of teledentistry in undergraduate dental programme not only help to promote "buy-in" of the dental practitioners towards teledentistry, this will also promote acquisition of the required understanding and competencies in teledentistry. Some studies have shown that dental students have adequate knowledge, attitude, and awareness regarding teledentistry; they were aware of teledentistry, its benefits, drawbacks, and possible challenges. The presentation aims to provide an overview and share experiences in incorporating teledentistry module in the undergraduate programme.

Jae-Sung Kwon

- Assistant Professor and Chair, Department and Research Institute of Dental Biomaterials and Bioengineering, Seoul, Republic of Korea



Prof. Jae-Sung Kwon is a medical doctor with full registration with General Medical Council of the United Kingdom. Following graduation in University of Nottingham (BM BS), he gained 2 years of clinical experiences in hospitals located in the U.K.

He studies for Masters in Medical Education (MMedSci) in University of Nottingham, with theses paper on quality assurance system in medical education.

He then turned his interests toward dentistry and gained PhD degree in Dental Biomaterials and Bioengineering, in Yonsei University College of Dentistry. He is currently researching dental and medical applications of biomaterials with long-term goal of clinically relevant application and testing of biomaterials that would resolve many of clinical challenges. The primary focus of his laboratory has been development and testing of biomaterials for tissue regeneration and antimicrobial effects. He is also a vice-char of Dental Device Testing and Evaluation Center in Yonsei University College of Dentistry, which is official testing lab approved by Ministry of Food and Drug Safety in Korea. Hence, he has a strong track record in development and testing of such biomaterials as well as involvement of national and international standards related to dentistry and medical devices.

Additionally, he has been continuously working in the field of dental education. He is currently serving as Secretary for Executive Committee in Korean Institute of Dental Education and Evaluation (KIDEE), as well as many other roles in multiple committees within KIDEE. He has participated in development of on-line accreditation process system by KIDEE and actual accreditation process in schools/colleges in Korea. Also, he has been working as a Council Member of South East Asia Association for Dental Education (SEAADE).

Quality Assurance of Dental Education in Post-COVID On-line Learning Environment: Cases in Korea

Jae-Sung Kwon^{1,2,3}

 ¹ Department and Research Institute of Dental Biomaterials and Bioengineering, Yonsei University College of Dentistry, Seoul, Korea
 ² BK21 FOUR Project, Yonsei University College of Dentistry, Seoul, Korea
 ³ Korean Institute of Dental Education and Evaluation, Seoul, Korea

Trainings of dental professionals are important part of health and welfare globally. Such training system in dental colleges or dental schools would require adequate quality assurance system, so that students may gain competencies related to dental health and to be able to demonstrate relevant clinical outcomes.

Quality assurance of dental education has been maintained in Korea by accrediting system from Korean Institute of Dental Education and Evaluation (KIDEE). The organization has been actively working on quality assurance since its foundation in 2007, where each of dental education institute would require accreditation by law from KIDEE, under Higher Education Act and Medical Service Act in 2015. Still, due to changes in generations and expectations from dental professionals, as well as the outbreak of COVID19 resulted in significant changes in both dental education system itself as well as the quality assurance system.

Many of dental colleges and schools in Korea are now adapted to utilize on-line education system, not only for a didactic learning, but also in a way of applying new learning/teaching technique such as 'flipped learning'. Meanwhile, quality assurance of dental education has now become a continuous process rather than a work that is only to be considered every 4 or 5 years. Also, on-line systems such as on-line portfolio, on-line lecture system, video-on-demand system and on-line accreditation process system have been developed to aid these changes.

Here, such changes in Korea will be discussed as well as the impact on training competent dentists, as well as ensuring quality of dental colleges and schools, by considering cases in Korea.

Day 2 : November 8th, 2023 (Wednesday)

Plenary 2:

Utilization of Digital Technology in Global Health Governance

MODERATOR

Dr. Chung-Liang Shih

Director General, National Health Insurance Administration, Ministry of Health and Welfare, R.O.C. (Taiwan)

SPEAKER

Dr. Piya Hanvoravongchai

Secretary General, Thai National Health Foundation

Prof. Min-Huei (Marc) Hsu

Chief Data Officer, Office of Data Science, Taipei Medical University, R.O.C. (Taiwan)

Prof. Teng Liaw

Emeritus Professor, University of New South Wales, Australia

- 59 -

MODERATOR

Chung-Liang Shih M.D., Ph.D.

- Director General, National Health Insurance Administration, Ministry of Health and Welfare



Dr. Chung-Liang Shih served as the Director General of the National Health Insurance Administration, the Ministry of Health and Welfare. He was devising sustainable strategies for Taiwan's National Health Insurance (NHI) program, characterized by a macro perspective that prioritized the integration of NHI with preventive healthcare and long-term care. Dr. Shih exhibited a keen interest in the realms of digital healthcare and emerging medical technologies. His dedication extended to advancing NHI's digital transformation, considering financial, technological, and legal aspects, all with the goal of augmenting the health and medical standards of the population and fortifying the resilience of the healthcare system.

Dr. Shih previously held positions within the Ministry of Health and Welfare, including Director General of the Department of Medical Affairs, Director General of the Department of Planning, Secretary General and Vice Minister. He emphasized patient safety and medical quality. Dr. Shih actively worked to enhance healthcare systems and regulations, established robust mechanisms for reporting medical adverse events, and encouraged healthcare institutions to embrace stringent quality and safety protocols. He also advocated for a structured tiered system for emergency care responsibility hospital, aimed at reducing emergency room congestion and strengthening the overall healthcare network. Dr. Shih arranged general medical training systems, championing the inclusion of resident physicians in the Labor Standard Acts, and advancing pivotal policies and regulatory reforms in the ever-evolving domains of telemedicine as well as regenerative medicine.

Dr. Shih earned a Bachelor of Medicine degree from Kaohsiung Medical University and a Ph.D. in Health Policy and Management at the College of Public Health, National Taiwan University, with over a decade in clinical practice. Since 2006, he has assumed the adjunct assistant professor at both the College of Medicine and the College of Public Health within National Taiwan University. Dr. Shih's expertise encompasses various specialties, including emergency medicine, patient safety, medical quality, medical law, and the intricate landscape of public health policy.

Piya Hanvoravongchai

- Secretary General, Thai National Health Foundation



Dr. Piya Hanvoravongchai is a public health physician with extensive experience in international health policy and health economics. He is currently the Secretary General at the Thailand National Health Foundation, an independent non-profit organization that supports public health efforts for a healthier Thailand and Southeast Asia region. The foundation works with various national, regional, and global partners to promote knowledge creation and coordinate evidence-based policies for health, through its current initiatives on digital health, primary health care, community mental health, and global health.

Dr. Hanvoravongchai also teaches graduate courses on health systems and health economics at the Faculty of Medicine, Chulalongkorn University. He has been a strong advocate for digital health and health systems reform in Thailand through his role in a number of national policy platforms, including as a member of the National Health Reform Commission from 2017-2022. He has worked on various aspects of health systems including health system development, healthcare financing, health workforce management, both in Thailand and abroad.

Dr. Hanvoravongchai has received his M.D. from Mahidol University in Thailand, M.Sc. from London School of Economics, and S.D. from Harvard School of Public Health.

Rethinking Global Health Governance in the Age of Digital Health

Piya Hanvoravongchai* and Boonchai Kijsanayotin

The world has become increasingly digital, and the health sector is being increasingly transformed by new technologies and tools, creating new opportunities for better collaboration and coordination. While many of these tools can be useful and effective for healthcare services and population health, there are possibilities for more challenges to the health sector including potential exacerbation of existing inequalities in access to healthcare, concerns about privacy and security, and the threats of misinformation and disinformation, among others. In addition to these challenges, the digital age has also seen increased cross-border flows of people, knowledge, goods, and services. It has created new challenges for national and global health governance.

Thailand has made significant progress in developing digital health technologies and systems. Major health financing reforms introduced financial incentives for healthcare providers to enhance their health information systems investment. The national health reform agenda and the Thai Ministry of Public Health's digital health strategy set out a vision, strategic objectives, and a framework for actions to advance digitization and digital health transformation in the health sector. The Thai Health Information Standards Development Center was founded in 2012 to develop national health data standards to enable seamless health information exchange and interoperability among the health system functions. Nevertheless, the country is still facing several challenges that the country needs to address.

In this session, the challenges based on the experience in Thailand and the region will be described, followed by a discussion on the need to reimagine local and global health governance, to be wellsuited to meet the challenges of the digital age, and to fully realize the potential of digital health for population health and health equity. Three key areas that will be discussed include:

- Better data governance for health: This involves developing frameworks and agreements for data sharing and interoperability that protect privacy and ensure data security while promoting transborder cooperation.
- Supportive and collaborative digital health governance for equitable digital health transformation: This involves developing policies and programs that promote equitable access to healthcare while ensuring that digital health technologies are used responsibly.
- New approaches to global health governance: This involves going beyond the current focus on health security and pandemics to address broader health determinants and health policy & systems challenges.

Min-Huei (Marc) Hsu M.D, Ph.D.

- Chief Data Officer, Office of Data Science, Taipei Medical University
- Professor and Director, Graduate Institute of Date Science, Taipei Medical University



Dr. Min-Huei (Marc) Hsu is a Graduate Institute of Data Science Professor at Taipei Medical University. Dr. Hsu has dedicated himself to the adoption of health information technology. He has been deeply involved in digital health projects in Taiwan. He is one of the essential promoters of Taiwan's National EMR exchange program. Dr. Hsu was appointed Director of the Medical Informatics Center at the Ministry of Health and Welfare of Taiwan in March 2011. Before the MOHW appointment, Dr. Hsu served as CIO at Taipei Medical University and also a Consultant Neurosurgeon at Wanfang Hospital (a 746-bed hospital affiliated with Taipei Medical University). Besides, he is the author and co-author of more than 80 papers and articles in international conferences and scientific journals, focusing on health data, health information technology, e-health, electronic medical record system, hospital information management, and patient safety.

Digital Governance of SmartHealthcare

Prof. Min-Huei Hsu

Director, Graduate Institute of Data Science, Taipei Medical University

Director, Graduate Institute of Data Science, Taipei Medical University Digital governance of smart healthcare is the use of digital technologies to improve the efficiency, effectiveness, and transparency of healthcare systems. It involves the development and implementation of policies, procedures, and standards for the use of digital technologies in healthcare, as well as the oversight and monitoring of these technologies.

Digital governance of smart healthcare is important because it can help to improve the quality and safety of healthcare services, increase access to healthcare services, reduce the cost of healthcare services, promote innovation in healthcare and empower patients and citizens.

There are a number of key challenges to digital governance of smart healthcare, including:

- 1. The need to ensure the security and privacy of healthcare data
- 2. The need to ensure the interoperability of different digital health systems
- 3. The need to address the digital divide and ensure that everyone has access to digital health technologies
- 4. The need to develop ethical guidelines for the use of digital technologies in healthcare

Despite these challenges, digital governance of smart healthcare has the potential to transform healthcare systems around the world.

Here are some specific examples of how digital governance is being used to improve smart healthcare:

- Electronic health records (EHRs): EHRs are digital versions of patients' medical records. They can help to improve the quality and safety of healthcare by making it easier for healthcare providers to access and share patient information. EHRs can also help to reduce the cost of healthcare by eliminating the need for paper records and by making it easier to coordinate care across different providers.
- 2. Telemedicine: Telemedicine is the use of telecommunications technology to provide healthcare services to patients who are remote from the healthcare provider. Telemedicine can help to increase access to healthcare services for people who live in rural or underserved areas. It can also help to reduce the cost of healthcare by eliminating the need for patients to travel to see a doctor.
- 3. Artificial intelligence (AI): AI is being used to develop a variety of new digital health technologies, such as AI-powered diagnostic tools and AI-powered treatment plans. AI has the potential to revolutionize healthcare by making it possible to provide more personalized and effective care to patients.

In this talk I will discuss the importance of digital governance of smart healthcare and the role that it can play in improving healthcare systems around the world

Prof. Teng Liaw

- Emeritus Professor, University of New South Wales, Australia



Dr Liaw is an academic clinician, informatician, and Emeritus Professor at UNSW Sydney. He directed the WHO Collaborating Centre on eHealth at UNSW Sydney and works with WHO HQ (Geneva) and WPRO (Manila) on global digital health capacity building with a focus on maturity models, quality and interoperability of digital data and software agents and the implementation and evaluation of digital health interventions.

Dr Liaw has published extensively and is a thought leader on electronic decision support, mobile health, Digital Health Maturity Models, data quality & interoperability through global health, common data models (CDMs), socio-ethical issues in artificial intelligence and machine learning, clinical & data governance, and environment & corporate social responsibility. An example is his research in the harmonisation of large real world data repositories such as the ePBRN and MedicineInsight with international common data models, which has enabled collaborative international data-driven research internationally. His digital health practice, citizen engagement and policy work is being translated internationally through the WHO Collaborating Centre on eHealth and engagement with other WHO agencies, Global Digital health Monitor, I-DAIR and donor agencies.

Dr Liaw is a Founding Fellow of the International Academy of Health Science Informatics (FAHSI) and Australasian College of Health Informatics / Australian Institute of Digital Health (FACHI/ FAIDH), and an elected Fellow of the American College of Medical Informatics (FACMI). He is a Life Fellow of the Royal Australian College of General Practitioners (FRACGP). He has served on numerous committees of governments and national & international professional organisations. He continues to assess grant proposals submitted to the ARC and NHMRC, research foundations, government in Australia, and international funding bodies in UK, Netherlands, USA, Canada, India, Singapore and Malaysia. He was the External Examiner for the 2016 Malaysian Conjoint Board of Family Medicine Exams held in Kuala Lumpur.

Currently, he chairs the International Medical Informatics Association (IMIA) Primary Care Informatics WG and Australian RACGP National Research & Evaluation Ethics Committee. He is a member of the IAHSI Board and the Senior Advisory Board of the International Journal of Medical Informatics. He works closely with NGOs such as the Pacific Health Information Network and Asian eHealth Information Network.

Digital Global Health Governance Across Borders and Cultures

Prof. Teng Liaw

Emeritus Professor, University of New South Wales, Australia

Professor Liaw will describe the use of digital technologies & AI in global health in the context of networked multilateralism in a multicultural world coping with a lack of trust, geopolitical conflicts, environmental challenges and mis/disinformation. The context is the Needham Problem, with the solution being integration of western determinism with the eastern organic view of nature. A parallel is integration of principlist with communitarian ethics.

Cross-cultural interaction, integration and interoperability can be applied in 3 ways - *differentiation, convergence and hybridisation* – to the institutions, rules and processes of global health governance. Achieving digital global health benefits will require international cooperation on many areas of governance and ethical standards, while allowing for diverse cultural perspectives and priorities.

Digital Global Health Governance (DGHG) needs co-creation and diplomacy across geographic & sociocultural boundaries and include sociotechnical dimensions such as:

- 1. Technical: interoperability and quality of digital data & tools/agents.
- 2. Operational: integrated person-centred health services.
- 3. Ethicolegal: stewardship, governance & provenance over time; and
- 4. Social: equity & respect for human rights

The sociotechnical framework incorporates key concepts in the digital transformation of health across the "micro-meso-macro" levels of the enterprise architecture. The vision is a learning health organisation and system, with outcomes being the quality of policies, systems, tools, data, decisions and care.

The challenges to cross-cultural DGHG, including mistrust between cultures, will be described from four functional perspectives:

- 1. Data networks and analytics: FAIR, CARE & Five Safes.
- 2. Software agents and robots: Asimov's Laws.
- 3. Virtual reality and behavioural modification: Mis- and dis-information; and
- 4. Digitally enhanced and AI-driven models of care: Governance of AI.

Because Europe & North America and East Asia are prominent in the development of digital ethics and governance, I will focus on cross-cultural trust, cooperation and misunderstandings between them. Even where fundamental differences exist, productive cross-cultural cooperation can be achieved on practical issues, without complete agreement on principles, standards or more abstract values or principles. Academia can build greater mutual understanding and clarify where different forms of agreement may be appropriate. Practical initiatives include multilingual publication of key documents, exchange programmes, and research agendas on cross-cultural DGHG.

Best practice in DGHG require relevant competencies of individuals and capability maturity of organisations, including diplomacy to achieve greater cross-cultural cooperation on digital ethics and governance.

Parallel Session 3:

Resilience and Mental Health Promotion in Teens and Young Adults

MODERATOR

Dr. Lian-Yu Chen

Director General, Department of Mental Health, Ministry of Health and Welfare, R.O.C. (Taiwan)

SPEAKER

Prof. Chuan-Yu Chen

Professor, Institute of Public Health, National Yang Ming Chiao Tung University, R.O.C. (Taiwan)

Prof. Shu-Sen Chang

Professor and Director, Institute of Health Behaviors and Community Sciences, College of Public Health, National Taiwan University, R.O.C. (Taiwan)

Prof. Eric C. Strain

Director, Behavioral Pharmacology Research Unit, Johns Hopkins University School of Medicine, United States of America

Prof. Anthony Jorm

Emeritus Professor, University of Melbourne; Medical Research Council (NHMRC) Leadership Fellow, Australia

- 67 -

MODERATOR

Lian-Yu Chen, M.D., PhD.

- Director-General of Department of Mental Health at Ministry of Health and Welfare



Lian-Yu Chen, M.D., Ph.D. is the Director-General of Department of Mental Health at Ministry of Health and Welfare. She also serves as an assistant professor in the Institute of Epidemiology and Preventive Medicine at National Taiwan University and an Associate Professor in the Master's Program of Addiction program at National Taiwan Normal University. She received her psychiatric residency training in Taipei City Psychiatric Center and later obtained her Ph.D. at the Johns Hopkins Bloomberg School of Public Health. Her expertise is in addiction, mental health policy, and HIV prevention. She also has conducted numerous studies on comorbidities of psychiatric and substance use disorders and adolescent substance use. Her work has appeared in many academic journals, including the American Journal of Psychiatry, Journal of Clinical Psychiatry, Drug and Alcohol Dependence, and Addictive Behaviors. She has served as a principal investigator of several national grants in Taiwan, and has received several prestigious awards including the Sartorius Award from 5th World Congress of Asian Psychiatry, the Best Thesis Award from Taiwanese Society of Addiction Sciences, the Excellent Young Scholar of Ministry of Science and Technology, the National Anti-Drug Award, the Best Physician Award in Taipei Medical Association, and the Outstanding Alumni Award of College of Medicine of National Cheng Kung University.

Chuan-Yu Chen

- Professor, Institute of Public Health, National Yang Ming Chiao Tung University



Dr. Chuan-Yu Chen, PhD received training of drug dependence epidemiology at Johns Hopkins University Bloomberg School of Public Health. She has been a tenured professor at the National Yang-Ming Chiao Tung University since 2014. Dr. Chen also holds the Joint Investigator in the Center for Neuropsychiatric Research, National Health Research Institutes as well as the Adjunct Professor in National Taiwan University and Michigan State University.

Chuan-Yu's research has primarily focused on the investigation of (i) the evolution of substance use and problems and associated predictors in the young population, (ii) developmental/health problems and unmet needs in healthcare and social services for the children with substance-using parents, and (iii) the role of reproductive health and care for drugs-involved women in recovery.

Substance Use and Problems among Young People in Taiwan: Evolution and Predictors in the Context of the Family, School, and Community

Prof. Chuan-Yu Chen

Professor, Institute of Public Health, National Yang Ming Chiao Tung University

The peak of experimentation and initiation of alcohol and illegal drugs mostly emerges in adolescence. Early onset of illegal drugs not only elevates subsequent risk of substance use disorder but also increases the involvement in the criminal justice system in later life. To reduce premature death and life years with ill health associated with alcohol/illegal drug use, late childhood and adolescence should be the key phases for intervention.

In this presentation, the basic epidemiological background for alcohol and illegal drug use among Taiwan's young people will be briefly introduced, with a focus on the similarities and differences compared with other countries. In explicating the role of social context in shaping alcohol drinking and drug involvement in the first two decades of life, I will draw on our studies, including the 15-year Alcohol-Related Experience among Children (AREC), and findings from other works with national representativeness.

Given that the involvement of alcohol and illegal drugs in children and adolescents is link with a mixed vulnerability of unfavorable social milieu and developmental maladjustment, I therefore recommend integrating the contexts wherein youngsters are socially embedded as interventional components in order to ensure optimal development and well-being in young people in Taiwan.

Shu-Sen Chang

- Professor and Director, Institute of Health Behaviors and Community Sciences, College of Public Health, National Taiwan University



Professor Shu-Sen Chang is a suicide prevention and mental health researcher based at the College of Public Health, National Taiwan University, Taiwan. With a background in psychiatry and public health, he has applied tools of population health science to identify complex determinants of suicidal behavior and evaluate interventions aimed at preventing suicide and saving lives.

Professor Chang has worked extensively with local and international researchers investigating time trends, geographic variations, and risk factors of suicide, self-harm, and mental wellbeing as well as intervention effectiveness. He has published 90+ journal articles on the issues of suicide and suicide prevention.

Published in high-impact journals such as The British Medical Journal, PLOS Medicine, and The Lancet Global Health, Professor Chang's research contributes to the recognition of i) macroeconomic factors such as the 2008 global economic crisis as a contributor to increased suicide rates in countries around the world; ii) emerging methods for suicide as a significant factor of rises in suicide rates in several Asian countries; and iii) the effectiveness of regulating / banning high-lethality pesticides on preventing suicide.

Professor Chang actively advocates for prevention strategies informed by his research findings, and his research and advocacy contribute to Taiwan's recent ban on paraquat, a weed-killer that can lead to a painful death even when a small amount is ingested in an impulsive suicidal act. He was awarded by the Taiwanese Society of Psychiatry (2019 and 2023) for his advocacy works. Professor Chang has recently published the impact of the paraquat ban on reducing suicide.

In response to the challenge of a recent rise in youth suicide, Professor Chang has published on factors associated with such an increase. He is conducting research on youth and student suicides supported by Taiwan's Ministry of Health and Welfare and Ministry of Education to inform youth suicide prevention.

Professor Chang is currently a member of Taiwan's National Suicide Prevention Advisory Committee given his expertise and extensive research in suicide prevention and mental health.
Recent Trends in Youth Suicide and Potential Influencing Factors in Taiwan: Implications for Prevention Strategies

Prof. Shu-Sen Chang

Professor and Director, Institute of Health Behaviors and Community Sciences, College of Public Health, National Taiwan University

Suicide remains a major concern, contributing significantly to premature mortality among young individuals. It ranks as the fourth leading cause of death globally among those aged 15-29 and stands as the second leading cause of death among 15-44-year-olds in Taiwan. Recent evidence indicates a concerning rise in suicide rates among young people in several countries. Several studies indicate deteriorating mental health and increased suicide risk in youth during the COVID-19 pandemic. Notably, our recent research highlights a disconcerting development in Taiwan: while suicide rates have remained relatively stable or decreased in older age groups, youth suicide rates have increased since 2014. Specifically, suicide rates among individuals aged 15-24 have increased from 5.1 to 10.7 per 100,000 during 2014-2022. Our research shows an association of the rise in youth suicide rates with several factors. These include concurrent increases in parental divorce rates, internet usage, and youth mental health issues such as worry-related insomnia, and the prevalence of self-reported suicide ideation and attempts. It is also noteworthy that this increase in suicides predominantly involves hanging and jumping as methods. Survey data reveal a growing positive attitude toward suicide among young individuals, with an increasing proportion agreeing with the statement, "to die by suicide is a personal right." These findings hold important implications for the development of strategies aimed at preventing youth suicide. A comprehensive understanding of the underlying causes is crucial for crafting effective interventions. Increasing support for parents and families in distress, establishing responsible guidelines for internet and media content, promoting informed internet usage among youth, and strengthening mental health support systems are all potential pivotal measures. In the context of shifting attitudes toward suicide among young people, there is an urgent need to foster open discussions about mental health, resilience, and coping strategies. By creating a supportive environment that encourages help-seeking behavior and destigmatizes mental health challenges, we may work toward reversing the troubling trend of rising youth suicide rates. Finally, continuous exploration of factors associated with the rise in youth suicide and monitoring of youth suicide rates are essential to develop evidence-based strategies and evaluate their effectiveness

Eric C. Strain, M.D.

- The George E. Bigelow Professor
- Director, Behavioral Pharmacology Research Unit
- Johns Hopkins University School of Medicine



Eric Strain is The George E. Bigelow Professor in the Department of Psychiatry and Behavioral Sciences at Johns Hopkins University School of Medicine, the Director of the Behavioral Pharmacology Research Unit at Johns Hopkins and is also the Executive Vice Chair for Psychiatry at Johns Hopkins Bayview Medical Center. He maintains an active research program in substance use related issues, provides clinical care to patients, teaches medical students and residents, and provides administrative supervision in the maintenance of current substance use treatment programs and the development of new substance use disorder initiatives at Johns Hopkins. Dr. Strain is the former Editor in Chief for the peer-reviewed scientific journal Drug and Alcohol Dependence, and edited, with Maxine Stitzer, the books Methadone Treatment for Opioid Dependence and The Treatment of Opioid Dependence, and with Pedro Ruiz edited the fifth edition of Lowinson and Ruiz's Substance Abuse: A Comprehensive Textbook. He was the lead in developing the first buprenorphine curriculum, which was subsequently used as the primary resource to train U.S. physicians in the use of this medication for the treatment of opioid dependence. He has served as the Chair of the Food and Drug Administration's Drug Abuse Advisory Committee, the NIH ARM study section, and the American Psychiatric Association's Council on Addiction Psychiatry. In addition, he has served on the boards of The College on Problems of Drug Dependence (for which he is a Past-President), the American Academy of Addiction Psychiatry, and Baltimore Substance Abuse Systems. He also has served on various committees for the National Institute on Drug Abuse, the National Institute on Alcohol Abuse and Alcoholism, and the federal Center for Substance Abuse Treatment, and is a frequent reviewer for scientific journals in the area of substance use disorders. Dr. Strain is the recipient of several competitive grant awards from the National Institute of Health, and has published extensively on substance abuse-related matters. His research areas have included topics such as the optimal mechanisms for treating patients with substance use disorders, including opioid and cocaine dependence, the relationship between substance use and other psychiatric disorders, the abuse liability of novel medications, and the development of new pharmacotherapies for substance abuse treatment (including opioids and alcohol). His studies have included medications such as buprenorphine, methadone and LAAM, pharmacotherapies for alcohol dependence, and non-pharmacologic treatments for substance use disorders.

Recreational Cannabis Use and Medical Cannabis: What We Have Learned

Eric C. Strain, M.D. Johns Hopkins University School of Medicine

Use of cannabis, especially in the United States, has seen a marked change in both social perceptions and availability in recent years. The U.S. experience may serve as a useful lesson for other countries grappling with their approach to decriminalization and/or legalization of this drug. Legalization in the U.S. has occurred at a local (state) but not federal level, and has resulted in substantially increased availability of cannabis, initially for purported medical indications and now more generally for leisure use, but with considerable variability across regions of the U.S. Cannabis is viewed by some as a relatively safe drug compared to opioids, stimulants, and alcohol. However, it is a drug that can have consequences to its us, including acute effects on performance such as driving, potentially chronic effects from sustained exposure, as well as serving as a risk factor for the development of other medical conditions, including psychotic disorders. As cannabis development has moved into an industry mode of production, strains of cannabis with markedly higher proportions of the active component THC are being produced, which may increase risk of adverse effects. Medical cannabis generally remains a poorly developed area of medicine, and advertised therapeutic uses are often based on anecdotal reports rather than rigorous studies. This is not meant to detract from the possibility that components of cannabis may have useful medical indications. What we have learned about cannabis and its effects has not kept pace with its use and availability in recent years, and there are a number of areas that critically need rigorous research including long-term consequences to chronic exposure, effects on the developing brain, secondhand smoke risks, mechanisms to biologically determine acute use, effects when combined with other drugs, and optimal dosing and target condition efficacy when used as a therapeutic (to name just a few areas).

Prof. Anthony Jorm

- Emeritus Professor, University of Melbourne; Medical Research Council (NHMRC) Leadership Fellow, Australia



Anthony Jorm is an Emeritus Professor at the University of Melbourne and National Health & Medical Research Council (NHMRC) Leadership Fellow. His research focuses on building the community's capacity for prevention and early intervention with mental disorders. He is Editor-in-Chief of the journal Mental Health & Prevention and co-founder and Director of the not-for-profit organization Mental Health First Aid International. Previous positions he has held include NHMRC Australia Fellow, Chair of the Research Committee of Australian Rotary Health, Editor-in-Chief of the Australasian Journal on Ageing and President of the Australasian Society for Psychiatric Research. He has been listed in various rankings as one of the world's most cited researchers in Psychology and Psychiatry. He was recently awarded the prestigious James McKeen Cattell Fellow Award by the Association for Psychological Science.

Improving Parenting of Teens to Prevent Mental Health Problems

Prof. Anthony Jorm

Emeritus Professor, University of Melbourne; Medical Research Council (NHMRC) Leadership Fellow, Australia

Adolescence is a period of life where depression and anxiety disorders often first develop. Parents can potentially play an important role in reducing their teen's risk of developing these problems. To help parents in this area, we have developed an online intervention called *Partners in Parenting* (*PiP*), which aims to improve parenting practices and thereby reduce risk of teenage depression and anxiety problems.

Our first step in developing PiP was to carry out a systematic review and meta-analysis to identify parenting factors to target. This review found evidence for three protective parenting factors for depression (warmth, autonomy granting, and monitoring), and one for anxiety (warmth). In addition, we identified three parenting risk factors for both depression and anxiety: interparental conflict, overinvolvement, and aversiveness.

To identify specific actionable parenting strategies, we then used the Delphi expert consensus method with a panel 23 clinical and research experts. We found 190 specific parenting strategies that were endorsed by at least 90% of the panel as important for reducing risk of depression and anxiety problems. These strategies were written into a guidelines document: *How to prevent depression and clinical anxiety in your teenager: Strategies for parents.*

The content of the PiP intervention was based on the guidelines document. PiP involves three components: (1) a parenting scale that assesses the parent's current parenting practices against the recommendations of the parenting guidelines; (2) an individually tailored feedback report based on each parents' responses to the scale; and (3) a set of 9 interactive Web-based modules to inform changes in parenting practices, which are tailored to the parent's needs.

To evaluate the efficacy of PiP, we have carried out a randomized controlled trial with 359 parentadolescent dyads in Australia. Parents in the intervention condition received PiP, while parents in the control condition received a standardized package of five factsheets about adolescent development and well-being. Parents and adolescents were assessed at baseline, 3 months and 12-months later. We found significantly better self-reported parenting in the PiP group, with a medium effect size at 12 months, and also an improvement in parents' reports of depressive symptoms in their teen. However, there was no difference in the teen's own reporting of symptoms.

More recent research has involved a more intensive therapist-assisted version of PiP, which is designed for parents of teens who already have symptoms. In an uncontrolled trial with parents of adolescents being treated for anxiety and/or depression, the intervention improved self-reported parenting behaviours, parental self-efficacy, parent levels of distress, parent–adolescent attachment, and family functioning. However, significant changes in adolescent mental health were not observed.

The PiP program of research is a collaborative team effort. I would particularly like to acknowledge the leadership roles of Prof Marie Yap and Dr Mairead Cardamone-Breen.

Parallel Session 4:

Autonomy, Independence, and Friendly Living in an Aging Society

MODERATOR

Dr. Tsung-Hsi Fu

Associate Professor, Department of Social Work, National Taiwan University, R.O.C. (Taiwan)

SPEAKER

Prof. Cheng-Hsiung Chen

Architect, Jason Architects & Associates; Associate Professor(R) of Chung Yuan Christian University, R.O.C. (Taiwan)

Prof. Naohiko Hayata

Professor, Faculty of Information Media, Hokkaido Information University, Japan

Prof. Satoshi Ishii

Dean of Faculty of Architecture; Vice President, Tohoku Institute of Technology, Japan

Prof. Ko-Chiu Wu

Professor and Dean, College of Design, National Taipei University of Technology, R.O.C. (Taiwan)

- 77 -

MODERATOR

Tsung-hsi Fu

- Associate Professor, National Taiwan University



Employment

- 2017 Associate Professor, National Taiwan University
- · 2009 2017 Assistant Professor, National Taiwan University
- · 2003 2009 Assistant Professor, National Chung Cheng University

Education

· 1999 - 2003 PhD, University of York

Publications

- 1. Wang, Julia Shu-Huah, Jinbao Zhang, and Tsung-Hsi Fu, 2021. The effects of universal child allowance on family expenditure in Taiwan. Children and Youth Services Review, 129: 1-12.
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Prof. Cheng-Hsiung Chen

- Associate Professor(r), Chung Yuan Christian University Taiwan



My educational background is architecture, and my expertise includes: Architecture planning, Building type, Design methodology, Hillside planning, Special education facilities, Elderly living environment, and Welfare facilities & environment.

I established Jason Architects & Associate in 1967 and started construction business. In 1989, I returned to the Department of Architecture of Chung Yuan Christian University as a fulltime lecturer, and set up Geronarchitecture Studio to study the topics of the elderly and welfare architecture until I retirement in 2007.

During this period, I was promoted to a full-time associate professor, and served as the head of the Department of Architecture and the director of the research institute. At the same time, I also work part-time in the medical schools, college of human ecology, and design colleges of various universities.

In the past, I served as the vice chairman, executive supervisor, and supervisor of the Taiwan Association Gerontology, and a distinguished researcher at the Industrial Technology Research Institute. Now, I am a fellow of the Architecture Institute of Taiwan.

As follows:

- 1. Architect, Jason Architects & Associate (1967-present)
- 2. Chief, Geronarchitecture Studio (1989-present)
- 3. Director, the Department of Architecture, Chung Yuan Christian University Taiwan (2005-2007)
- 4. Researcher, Faculty of Engineering, National Tokyo University Japan (1994-1995)
- 5. Researcher, Faculty of Social Welfare, Christopher Private University Japan (2002)
- 6. Associate Professor (pt), Chung Yuan Christian University Taiwan (2007-2016)
- 7. Associate Professor (pt), National Taipei University of Technology Taiwan (2001-2015)
- 8. Associate Professor (pt), Taipei Medical University Taiwan (2010-2011)
- 9. Associate Professor (pt), Fu Jen Catholic University Taiwan (2009-present)
- 10. Associate Professor (pt), Shih Chien University Taiwan (2008-2019)
- 11. Vice President, Taiwan Association Gerontology (2012-2014)
- 12. Distinguished research, Industrial Technology Research Institute (2012-2022)
- 13. Fellow, Architectural Institute of Taiwan (2022-present)

The Symbiosis Community in Super-Aged Society

Prof. Cheng-Hsiung Chen Architect, Jason Architects & Associates; Associate Professor(R) of Chung Yuan Christian University, R.O.C. (Taiwan)

Symbiosis communities aim to provide safe living places, peace of mind care services, and a stable community environment, With many generations of inhabitants, many levels of assistances, and many kinds of building types as content.

They can solve the four major problems of a super-aged society, Including: Economy, Elderly care, intergenerational, society, etc.

Can build a self-reliant and autonomous symbiotic community, Achieve the ultimate goal of aging in place.

Prof. Naohiko Hayata

- Professor, Faculty of Information Media, Hokkaido Information University, Japan



Naohiko Hayata is a professor at Hokkaido Information University. His areas of expertise are environment- behavior studies, and architectural planning. He has conducted research, consulting and design practice on living environments for the elderly and community formation in an aging society. The "ENGAWA services" proposed by his research team have been adapted and applied in Taiwan by Dr. PoTsung Chen and the Tainan YMCA facilities.

He also serves as vice president of Hokkaido Research Association for Community Development.

He completed his PhD in March 1996 from the Graduate School of Engineering, Hokkaido University, majoring in architecture.

He then worked as a postdoctoral researcher under Professors Gary Moore and Gerald Weisman at the University of Wisconsin-Milwaukee before becoming an Instructor at Hokkaido University in October 1997. While working at Hokkaido University, he was also a postdoctoral fellow at the University of Sydney from February 2001.

Since 2001, he has been working at Hokkaido Information University. At the same time, he was appointed as a guest professor at the Department of Sociology, Shenyang Normal University. He was a frequent resident at the Institute on Aging and the Environment, University of Wisconsin-Milwaukee, as well as at the Federal University of Rio Grande do Sul in Brazil, and Rajamangala University of Technology Thanyaburi in Thailand. He has lectured at many national and international universities and organizations, including National Cheng Kung University.

EN-GAWA (緣側) Service 2.0: A Mechanism to Connect All Kinds of People to the Local Community

Naohiko Hayata

Professor, Faculty of Information Media, Hokkaido Information University, Japan

EN-GAWA services can be defined as community activities operated by welfare facilities on their own or in cooperation with local NPOs and volunteer organizations, support the lives of the older adults and create a sense of purpose in their lives.

These activities are mainly targeted at the older adults and local residents, and are a mechanism to promote living and interacting with the community.

It creates a place where people can casually go to talk on the porch of their neighbor's house.

An important aspect of the concept is to build mutual aid relationships among the older adults or between the older adults and local residents, while also utilizing the power of the healthy young-old and others.

Examples of such activities will be *briefly* presented and the sustainability of this activity under the New Normal will be considered.

Prof. Satoshi Ishii

- Dean of Faculty of Architecture; Vice President, Tohoku Institute of Technology, Japan



Professor Satoshi Ishii received his Doctoral degree (Dr. Eng.) in Architecture from the University of Tokyo in 2000. His expertise lies in the design and planning of welfare facilities. He has conducted research on architectural planning for elderly care facilities and environmental design for people with dementia and has published numerous articles and book chapters. He has chaired numerous design proposal review panels and served on various national and municipal review committees, and spent two and a half years as a Finnish government-sponsored student in 1997 and eight months as a visiting researcher in 2012, conducting research on housing and facility environments for the elderly. He has given several invited lectures at universities and conferences in China and Taiwan. He currently serves as Vice President of Tohoku Institute of Technology and Dean of its School of Architecture.

Japanese Trends in Elderly Care Facility Planning and Creating Environments for Dementia

Satoshi Ishii

Dean of Faculty of Architecture; Vice President, Tohoku Institute of Technology, Japan

The presentation will consist of two parts. The first will explain the architectural trend and current situation of nursing homes for the elderly in Japan, together with changes in the system and the concept of care. It will explain the transition from "places of care" to "places of living", the creation of environments that demand privacy, and the development of initiatives in Japan that involve not only the elderly, but also the disabled, children, the general community, and other people. The second is about creating a 'physical' environment for people with dementia. It is important to create the appropriate environment for people with dementia. In the future, careful consideration of various aspects such as colour, signage, design, and space creation, as well as building and town planning that puts this into practice, will be required. The importance of designing environments from the perspective of people with dementia, while listening to their voices, will also be mentioned.

Prof. Ko-Chiu Wu

- Professor and Dean, College of Design, National Taipei University of Technology, R.O.C. (Taiwan)



Dr. Wu Ko-Chiu is Professor and Dean, College of Design, National Taipei University of Technology. He holds M. Arch. (U. Penn), M.S. in Computer Science, and PhD. in Civil Engineering (NTU, Taiwan), and works as an interdisciplinary design educator. He served as an architect in USA and Taiwan, and an officer in Taiwan government. Dr. Wu has studied architectural design and planning, ergonomics and inclusive design, digital learning and interactive technology, information technology and management. At present, the research interests include planning for aged-friendly environment, gamification learning and exercise-game flow, recognition of physiological signals in mobile interface, emotion categorization and topic mining, urban information visualization and space syntax, children information seeking behavior, social network service and library marketing. He has led several investigations of public open space for friendly accessibility of the elderly in Taiwan, and pointed out the importance of equalize usage by all sectors of society in public domains. For children, Dr Wu focus on the development of new educational technologies for digital native, such as a book-searching application of National Library of Public Information. He also cooperated with Taipei Medical University to develop ubiquitous game application for the elderly tongue training to break physical limitations around human.

Ubiquitous Exergame for the Elderly- A Tongue-Training Case Study

Ko-Chiu Wu

Professor and Dean, College of Design, National Taipei University of Technology, R.O.C. (Taiwan)

Taiwan is moving into a super-aged society. WHO aged-friendly city asks for building a welcome public environments and community. With the help from varied digital technologies, the elderly can enjoy ubiquitous services to their daily life. To realize this concept, we invited a music tongue exergame. This game applied face recognition, mobile technology, and gameflow mechanism to enhance participants' motivations to practice their tongue muscles. Experiments results demonstrate game effectiveness, and gameflow zone. The ubiquitous exergame for medical rehabilitation to enhance the motivation of continuous training is a good way to improve daily exercise for the participated elderly. Further researches need to forming business models in aged-friendly environments.

Plenary 3: Challenge of Global Health Governance

MODERATOR

Dr. Wui-Chiang Lee

Deputy Superintendent, Taipei Veterans General Hospital, R.O.C. (Taiwan)

SPEAKER

Prof. Padmini Murthy

Professor and Global Health Director, New York Medical College School of Health Sciences and Practice, United States of America

Dr. Sura Wisedsak

Director-General, Department of Health Service Support, Ministry of Public Health, Steering Group Member, Global Health Security Agenda (GHSA), Thailand

Mr. Ronald Lavater

Chief Executive Officer, International Hospital Federation (IHF)

- 87 -

Prof. Bettina Borisch

Executive Director, World Federation of Public Health Associations (WFPHA)

MODERATOR

Dr. Wui-Chiang Lee

- Deputy Superintendent, Taipei Veterans General Hospital



Dr. Wui-Chiang Lee is an accomplished healthcare professional who has dedicated his career to improving hospital management and medical quality. He began serving in the Veterans Affairs Council (VAC) healthcare system in 1992. After completing his training in internal medicine and gastroenterology in 1994, Dr. Lee joined Taipei Veterans General Hospital (TVGH).

Dr. Lee expanded his knowledge by pursuing further studies at Johns Hopkins University Bloomberg School of Public Health in the United States, where he obtained a Master and Ph.D. degree in health policy and management. After study, Dr. Lee first served as Deputy Director of the Department of Medical Affairs and Planning, then as Director of the Medical Quality Management Center and Director of the International Medical Service Center at TVGH, each position contributing to improving hospital management efficiency and medical quality.

Dr. Lee's impressive performance and commitment to healthcare excellence earned him several secondment periods. In 2011, he served as CEO of the Taiwan Joint Commission. In 2013, he was seconded again to serve as Director-General of the Department of Medical Affairs, Ministry of Health and Welfare. Upon returning to TVGH, Dr. Lee was promoted to Director of the Department of Medical Affairs and Planning in 2016, wherein he continued to help hospital directors implement hospital-wide medical management work.

Dr. Lee's contributions to healthcare go beyond hospital management. During the COVID-19 pandemic, he participated in large-scale PCR testing tasks at various locations, scheduled hospital beds and isolation wards, promoted telemedicine clinics, long-COVID clinics, digital transformation, and participated in international pandemic control conferences many times to share Taiwan's successful experience. He completed emergent COVID-19 PCR testing and prescription for more than 26,000 infected individuals using a drive-through model, winning the Extraordinary Contribution Award for COVID Pandemic Control from the Taiwan government and the Distinguished Alumni Award of Johns Hopkins in 2021.

Dr. Lee's unwavering dedication to healthcare is reflected in his outstanding achievements. He has supervised the establishment of the Heavy Ion Treatment Center for Cancer, which was inaugurated in May 2023. Despite his public commitments, Dr. Lee never allowed it to interfere with his clinical work. He has always been on the front line, providing top-quality care to the patients he serves.

Prof. Padmini Murthy

- Professor and Global Health Director, New York Medical College School of Health Sciences and Practice, United States of America



Dr. Padmini (Mini) Murthy is a globally recognized health professional in her roles as a physician and public health expert. She is Professor and Global Health Director at New York Medical College School of Health Sciences and Practice, USA and chair of the International Health Section of American Public Health Association and Global Health lead for the American Medical Women's Association and the NGO rep to United Nations.

Dr. Murthy has been working with UN ambassadors and UN missions to promote women's health globally with local effort in India, Malawi, Suriname, Grenada, Liberia and Nepal

During the COVID crisis in 2020/ 2021 Murthy has spearheaded efforts working with other NGOs to provide relief to India, Italy, and Navajo nation. She has been interviewed by yahoo, CNN, sky news and other media channels.

Dr. Murthy has made over 250 presentations nationally and internationally is widely published and is the author and editor of *Women's Global Health and Human Rights, Technology and Global Public Health. Her other books include Mini's Musings and Glorious Global Ganesh. She is currently working on her 5th book on Women Achievers.*

Dr. Murthy has been the recipient of numerous national and international awards, some of them include the following:

- First Indian born American in over 75 years to receive the *Elizabeth Blackwell* for her work in promoting women's health globally.
- Recipient Sojourner Truth Pin given to those women who excel in community service.
- · Recipient of Jerusha Jirad Oration recognizing her work
- Recipient of Citation from NY State Assembly woman Jennifer Rajkumar for her contributions as an outstanding leader in Medicine
- In December 2021, Murthy has been the recipient of President of The United States Lifetime Achievement Award for Volunteer Service.
- In March 2022 Murthy was named non-government advisor of the Official United States Delegation to the 66th United Nations Commission on the Status of Women.
- In June 2022 Murthy was an invited civilian expert to the National Security Seminar at Army War College, PA

- In June 2022 Murthy received the inaugural award as an outstanding Physician Leader for work from Chung Gung Foundation Taiwan
- \cdot In Dec 2022 Murthy received the Top Global health Advocate Awrd from IOATP
- In March 2023 Murthy was honored at the Consulate Generate of India (CGI) to NY by FIA and CGI on occasion of International Women's Day

Why Gender Matters in Global Health Governance

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Introduction:

Gender inequality continues to be a major challenge globally and some of the contributing factors include existing patriarchal norms and policies, which can result in poor health outcomes for all populations and just not for women and girls.

Role of Women in Societal Development:

According to the World Health Organization Women account for 67% of the global health and social care workforce. Women form the backbone of the health care industry and provide essential health care services for around five billion people globally. It is ironic that in spite of women's input of an estimated US three million dollars annually they are seldom given a seat during policy discussion on health issues including gender related issues.

Gender and Global Health Governance

According to "The UN Educational, Scientific and Cultural Organization's Women in Science data show that less than 30% of the world's researchers are women, comprising only 19% in south and west Asia, 23% in east Asia and the Pacific, 30% in sub-Saharan Africa, 32% in North America and western Europe, and 45% in Latin America." (UNESCO 2019)

This lack of inclusion of women and continued gender imbalance in high level global leadership has been the norm for along time . For example a study published in 2022 in BMJ by van Daalen et al identified that during the COVID 19 pandemic a study focusing on gender representation specifically in national COVID-19 task forces found that only 3.5% of the 115 identified COVID-19 decision-making and expert task forces had gender parity, and 85.2% were majority men. (BMJ 2022). It is indeed alarming that at present just 7 years before the conclusion of the 2030 Agenda of Leave No One Behind Only 20% of global health institutions exhibit gender parity on their board of directors, and a mere 25% show gender parity at the senior management level.

The countries which had women as heads of state had a strategic and more effective response to COVID and this is a powerful illustration of the important role played by women in advancing global health.

Recommendations:

1. It is vital and there is a sense of urgency that global health system systems, governments, foundations act to prioritize intersectional approaches which promote gender equity at all levels.

2. This prioritization of gender equity needs to extend to extend to the C suites where women (including those from low and mid income countries) are given a seat at the decision making table and this can help facilitate transformative policies which are more transparent, accountable and function more effectively

References

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Dr. Sura Wisedsak

- Director-General, Department of Health Service Support, Thailand Ministry of Public Health, Steering Group Member, Global Health Security Agenda (GHSA)



Dr. Sura holds an MD from the Faculty of Medicine at Chulalongkorn University; diplomas from the Thai Board of Preventive Medicine and the National Defence College; and certificates from the Civil Service Executive Development Program/Office of the Civil Service Commission (OCSC), Stanford Executive Programme Graduate School of Business, and the Advanced Master of Management Program of the National Institute of Development Administration in Thailand.

Challenge of Global Health Governance: Future Challenges in Pandemic Management

Dr. Sura Wisedsak

Former Chair of Global Health Security Agenda Sub - Committee in accordance with International Health Regulations, Ministry of Public Health, Thailand

The focus of this article is on challenges in global health governance, with a primary focus on future pandemic management. Four cross-cutting recommendations have been identified to enhance future preparedness by drawing insights from key review programs, such as the Intra- action Review (IAR), Universal Health and Preparedness Review (UHPR), Joint External Evaluation of IHR, and the Global Health Security Index.

The first one is the importance of an advanced digital data infrastructure highlighted, which integrates clinical, public health, and laboratory data, and ensures its security and appropriate communication to the targeted population. An integrated digital database is demonstrated in a real-world application that utilizes diverse information sources synthesized for targeted communication via smartphone applications in managing COVID-19.

The second one is a comprehensive strategy emphasizing a 'whole of government and whole of society' approach is highlighted, realizing the need for collaboration between government and non-government entities to address challenges affecting vulnerable groups. To maximize detection, prevention, and response to health threats, a robust network across multiple sectors is showcased in the practical implementation of this strategy.

The third one is that pandemic management at the domestic level is emphasized by highlighting the importance of legal frameworks, particularly the National Communicable Disease Act. However, it is observed that it has shortcomings during large outbreaks, leading to the necessity of exploring other legal instruments that govern health surveillance and response. The concept of legal preparedness is introduced to emphasize the importance of identifying and rectifying gaps and redundancies in existing legal tools.

The last one is the importance of sustainable financing mechanisms, which is in the spotlight for better health security, with a commitment to a cohesive approach among stakeholders from the initial planning phase.

In conclusion, the Multilateral Cooperation and Integration Plan needs to be established, which is currently being implemented through the National Action Planning for Health Security. To enhance national security and enhance health and socioeconomic systems, this plan is a crucial strategy.

Mr. Ronald Lavater

- Chief Executive Officer, International Hospital Federation (IHF)



Ronald Lavater, MPA, FACHE, joined the International Hospital Federation (IHF) in 2020 as its Chief Executive Officer. He leads the IHF Secretariat team and all its programmes, including the Geneva Sustainability Centre, and the annual World Hospital Congress and IHF Awards.

Ronald is a healthcare executive with 25 years' leadership experience in public and investor-owned healthcare companies in the USA and international markets. With extensive knowledge of hospital operations and ambulatory services, including retail urgent care, Ronald has a deep and broad-based understanding of the healthcare services sector with a global perspective.

Before joining the IHF, he served as CEO of WellStreet Urgent Care in Atlanta, Georgia. From 2014 to 2016, he was the CEO for Al Noor Hospitals Group, Plc. He also worked for six years for Johns Hopkins Medicine International, serving first as CEO of Corniche Hospital in Abu Dhabi for five years, and later as a senior executive representing many of the company's interests in the Middle East.

Ronald began his healthcare career in 1993 as an analyst for senior management of insurance company Blue Cross and Blue Shield. After a few years, he was recruited by Hospital Corporation of America (HCA) where he held several leadership roles in US hospitals for over a decade, including CEO and COO. Ronald has also served as a Non-Executive Director for Optegra Eye Health Care.

Ronald holds a bachelor's degree in political science from the University of Florida and a master's degree in public administration from Florida State University. He is a Fellow with the American College of Healthcare Executives (ACHE) and previously completed a two-year term as president of the Middle East & North Africa ACHE group.

Promoting Forward Thinking Leadership

Ronald Lavater

Chief Executive Officer, International Hospital Federation (IHF)

Responding to the challenges of global health governance requires hospital managers to possess a diverse set of leadership competencies, as showed in the latest update of the IHF Leadership Competency Model. These competencies, including those related to sustainability, are essential to effectively navigate the complex landscape of healthcare systems, policies, and international collaborations.

Prof. Bettina Borisch

- Executive Director, World Federation of Public Health Associations (WFPHA)



Prof Borisch is a global public health expert. She has a long experience in collaborating with international organizations, both at the UN level as well as at the European level. She also serves in different functions in the NGO sphere, such as President of Europa Donna, CEO of the World Federation of Public Health Associations and board member of several other Public Health organizations. She created the Swiss Forum of Europa Donna and was a board member of "mamazone", Germany. As civil society worker she focusses on strengthening the multilateral system and its organizations as well as the putting the voice of underserved high on the agenda. She has a longstanding experience interacting with both European and global organisations.

She is a professor emerita of Public Health at the Institute of Global Health, Medical Faculty, University of Geneva. A medical doctor by training she first specialized in clinical pathology and was the director of the Institute of Clinical Pathology, University of Geneva before orienting her work to Public Health. Her research interests include gender health, health systems, universal health coverage and health governance. In her life as a histopathologist, she was involved in cancer research with an emphasis on Non-Hodgkin-Lymphomas and other neoplastic lesions such as breast cancer. This led to up to her public health work in breast cancer screening, early diagnosis and treatment. More recently she focusses on data, AI and Public Health.

Global Health: A Geopolitical Challenge?

Prof Bettina Borisch, MD, MPH, FRCPath CEO, WFPHA, University of Geneva

The so-called "Grand Decade for Global Health" was said to have been from 1998 to 2008. Several main features of innovations in global health took place during this period. Creation of new agencies, public-private partnerships and many more were happening. There were also examples of great global health governance, as exemplified by the framework convention on tobacco (FCTC). The situation is different today. Several shift in geopolitics, crisis, and changes in attitudes to multilateralism have happened. Nevertheless, global health governance is more important than ever, given the health threads ahead.

The presentation will focus on the way forward for global health governance in a shaken world.



