

Proceedings PMAC 2023 Side Meeting

Scale up the Health Professional Development to Protect Health from Climate Change

held on 24 January 2023



The Partnership Project for Global Health and Universal Health Coverage (GLO+UHC) Phase 2

Issued in December 2023

✦ **Executive Summary** ✦

Climate change is one of the biggest health threats in the 21st century, causing climate-related disasters such as heat waves, wildfires, hurricanes, extreme rainfall, flooding, rising sea-levels, to name but a few.

These climate-related disasters lead to climate-sensitive health risks, for example, zoonoses, food-, water- and vector-borne diseases and injuries, heat-related illnesses, respiratory illnesses, as well as the attendant mental health issues.

The health workforce is a core part of the healthcare system, serving as the delivery mechanism of healthcare service as a whole. The health workforce needs to deal with health harms caused by climate change and climate-related disasters. The circumstances present an opportunity for health professional development to commence the next stage of evolution. That is to adapt to climate change by incorporating climate change as an integral part of health profession development.

This Prince Mahidol Award Conference (PMAC) side meeting aimed to review the impact of climate change on health. We examined the current state of health professional development within the current overall health and climate change contexts, with a view to sharing the experiences and good practices that will be useful in preparing healthcare workers for the challenges ahead, namely, the health risks facing the population and/or health system as a result of climate change.

The Partnership Project for Global Health and Universal Health Coverage (GLO+UHC) Phase 2 – a collaboration between Thailand’s Ministry of Public Health (MOPH), National Health Security Office (NHSO), and the Japan International Cooperation Agency (JICA) – organized the Side Meeting of the PMAC on 23 January 2023 in Bangkok. The theme for the side meeting was “Scaling up health professional development to protect health from climate change”.

The side meeting contained three sessions. Session 1 focused on the “WHO strategy on climate change, health and health workforce”. Session 2 featured “Good practice to prepare health workforce for climate change”; Session 3 was “Panel discussion: Moving forward to scale up the health professional development”.

Throughout the three sessions of the side meeting, participants deepened their understanding of the global climate change situation, and health professional development. The efforts of global community and each organization were making in facing the remaining challenges that lie ahead were also reviewed. The side meeting culminated in a discussion how to better scale up the health workforce to address the concomitant health issues of climate change.

The side meeting invited five speakers from the World Health Organization (WHO), WHO Western Pacific Regional Office (WPRO), the Philippines, JICA technical cooperation project, and the United States. Dr. Diarmid Campbell-Lendrum from WHO presented the WHO Climate Change and Health Systems Framework; Dr. Masahiro Zakoji from WPRO presented the challenges for health professionals in responding to climate change; Dr. Renzo R. Guinto from the Philippines presented the need for medical students in particular to have a perspective on human health and planetary health, and presented some actionable examples. Mr. Shuichi Ikeda introduced the history of countermeasures to climate-related disasters, along with an overview of disaster management in the Association of Southeast Asian Nations (ASEAN), before going on to present the JICA technical cooperation project's development of regional networks to address large scale disasters, including climate-related disasters in the ASEAN region. Dr. Payoungsak Kittikul suggested that, based on his years of industry experience, there is an urgent need to review sulfur content limitations for diesel fuel to reduce air pollution, in particular the Particulate Matter 2.5 μ m (PM2.5) concentration levels, and to improve the air quality in Thailand, especially in Bangkok.

In the panel discussion, panelists acknowledged how important it is to involve all people and societies, such as the next generation, the indigenous peoples – who have already fought all their lives to protect our planet – or the frontline health workforce, to the decision-making process. Furthermore, incorporating climate change issues into health professional education was strongly encouraged, with ways to reduce the CO₂ emissions from health system emphasized.

In conclusion, participants deepened their understanding of the global climate change situation, its implications on health, and how to scale up the health professional development. They gained knowledge on how to reinforce the health workforce to fight against climate change, and shared positive discussions on how to move forward to protect population health and our planet.

The panelists delivered a message that “The hope is in the future. Tackling climate change requires an enormous amount of courage as well. If we keep doing what we advocate, it will be sustainable and lead to a scaling up”. As we are truly concerned about our planet, we believe that everyone on the earth has a duty to fulfill. The GLO+UHC Project will apply the fruitful discussions of the side meeting to further activities, leading to more resilient Universal Health Coverage (UHC) overall.

The GLO+UHC Project conducted this PMAC side meeting in collaboration with JICA, the National Health Professional Education Foundation (NHPE), NHSO, and MOPH, with the aim of strengthening health systems, and the health workforce in particular. We wish to have further collaboration towards the achievement of UHC based on the long-standing partnership between Thailand and Japan.



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List of abbreviations

AHA Centre	The ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management
ALD on DHM	ASEAN Leaders' Declaration on Disaster Health Management
ARCH	Project for Strengthening the ASEAN Regional Capacity Building Project on Disaster Health Management
ASEAN	Association of Southeast Asian Nations
BMA	Bangkok Metropolitan Area
CO₂	Carbon dioxide
COP	Conference of the Parties to the United Nations Framework Convention on Climate Changes
COVID-19	Coronavirus Disease 2019
EMT	Emergency Medical Team
GHG	Greenhouse gas
GLO+UHC	The Partnership Project for Global Health and Universal Health Coverage
HRH	Human Resources for Health
IPE	Interprofessional Education
JICA	Japan International Cooperation Agency
MOPH	Ministry of Public Health
NHPE	National Health Professional Education Foundation
NHSO	National Health Security Office
PM_{2.5}	Particulate Matter 2.5 μ m (Particulate Matter has a diameter of 2.5 micrometer or smaller)
PMAC	Prince Mahidol Award Conference
SDGs	Sustainable Development Goals
UHC	Universal Health Coverage
WHO	World Health Organization
WPRO	World Health Organization (WHO) Western Pacific Regional Office
I-EMT	International Emergency Medical Team



Background

Climate change is one of the biggest health threats in the 21st century, causing climate-related disasters such as heat waves, wildfires, hurricanes, extreme rainfall, flooding, rising sea-levels, etc. These climate-related disaster leads to climate-sensitive health risks, e.g., zoonoses, food-, water- and vector-borne diseases, injuries, heat-related illnesses, respiratory illnesses, mental health issues, etc.

The progress made so far to promote global health and reduce poverty risks being canceled by the climate crisis. What's more, the climate crisis could increase the existing inequalities in health among population worldwide. Though many countries have made great efforts in realizing Universal Health Coverage (UHC) as one of the targets of Sustainable Development Goals (SDGs), the climate crisis could threaten the achievement of UHC by damaging existing healthcare infrastructure and hampering the access to healthcare services, and more.

The health workforce is a core part of the healthcare system, serving as the delivery mechanism of healthcare service as a whole. The health workforce needs to deal with health harms caused by climate change and climate-related disasters. The circumstances present an opportunity for health-professional development to commence the next stage of evolution. That is to adapt to climate change by incorporating climate change as an integral part of health profession development.

Training, education, mentoring and knowledge-sharing enhance the professional competence of the health workforce. However, according to *"2021 WHO HEALTH AND CLIMATE CHANGE GLOBAL SURVEY REPORT"* (1), only 40% of countries reported they have conducted training in climate change and health in the last two years. Therefore, more efforts are needed to ensure capacity-building of health workforces. The training must be far-reaching, and cover a wide array of skills pertaining to climate change and health that strengthens their readiness for UHC and health emergencies. Incorporating these issues into health professional education was also highlighted.

The *"COP26 special report on climate change and health: the health argument for climate action"* (2) recommended training the health workforce to respond to climate change. In the Prince Mahidol Award Conference (PMAC) 2023 side meeting, we aim to review the global context of climate change and health and examine

the core competencies required of the health workforce to cope with the risks to population health and the health system itself. The issues pertaining to necessary training materials, education methods, research, programs, and updated curricula were also raised. We believe this PMAC side meeting helps to build momentum to promote health professional development to better deal with climate change and health issues.



Opening



Assoc. Prof. Dr. Prasobsri Ungthavorn, Health Insurance Expert, National Health Security Board member, Thailand

Dr. Prasobsri Ungthavorn greeted everyone and introduced herself as the chairperson of this PMAC side meeting. She mentioned that PMAC 2023 is the first PMAC to be held in person after the COVID-19 pandemic.

She posed the theme of the side meeting, thinking about scaling up health professional development as a way to protect people's health from climate change. Health professionals, especially the young generation, have to be conscious about climate change and now is the time to be forward thinking about it. PMAC, Ministry of Public Health (MOPH), National Health Security Office (NHSEO), National Health Professional Education Foundation (NHPE), Japan International Cooperation Agency (JICA), and JICA Partnership Project for Global Health and Universal Health Coverage (GLO+UHC) are going to protect and prepare the future generation to be ready to deal with problems arising from the climate change. She hoped that the conclusions drawn from this PMAC side meeting will lead to achieving UHC despite the interruptions caused by climate change.



Prof. Vicharn Panich MD, Chairman of the International Award Committee of the Prince Mahidol Award Foundation, Thailand (Video recording)

Prof. Vicharn Panich started his opening remarks by mentioning that the World Health Organization (WHO) and the Lancet Commission both identified climate change as the biggest global health threat of the 21st century. To create the necessary coordinated response to address climate change and to protect human health, a series of United Nations agreements has been developed by the nation states. These include the SDGs adopted in 2015, and the Paris Agreement adopted in 2016.

All sectors of society, including the health sector, must commit to solving the issue urgently if the agreed targets of limiting global warming to less than two degrees Celsius and preferably to less than 1.5 degrees Celsius are to be met. Climate change has a significant impact on human health, as it can lead to increased pollution, and the spread of diseases due to changes in weather patterns and ecosystems and extreme weather events.

Rising temperatures can lead to heat stress, and an increase in the frequency and severity of extreme weather events. Both of which can cause injuries and deaths. Climate change can also lead to the spread of infectious diseases, through changes in the distribution of disease vectors, such as mosquitoes and ticks.

Additionally, air pollution, which is often exacerbated by climate change, can lead to greater risk of cerebral and cardiovascular diseases. For example, climate change is associated with increased levels of PM 2.5 which is a type of air pollution that can cause significant health impacts. In terms of healthcare, the increased burden of diseases caused by climate change can place strain on healthcare systems and require the development of new approaches to treating and preventing these illnesses.

Thus, there is a need to educate healthcare providers on the health effects of climate change, and the ways in which they can help to mitigate its impact.

He shared his expectation that this PMAC side meeting might bring forth a fruitful discussion on how the healthcare and health education systems can engage with climate change. This being done to ensure that the public has access to the care they need, as well as to protect the health and well-being of the health workforce. He wished all a very successful meeting.



Prof. Wanicha Chuenkongkaew, MD, Secretary-General, National Health Professional Education Foundation, Thailand

Prof. Wanicha Chuenkongkaew introduced NHPE as an organization which has been working with multiple regional and international organizations. In collaboration with JICA, NHPE is working on capacity building for interprofessional education (IPE).

For example, JICA supported several NHPE staff and faculty members of health professional educational institutions in Thailand to participate in the IPE training course at Gunma University in Japan which is the WHO Collaborating Centre for Research and Training on IPE. In addition, JICA GLO+UHC Project, Gunma University and NHPE are conducting a research activity with researchers from Indonesia, Mongolia and Thailand, studying the reliability and validity of assessment instruments for IPE. This international collaborative research activity will be presented at the international conference *“All Together Better Health ATBH XI, The 11th International Conference on Interprofessional Practice*

and Education” in November 2023, in Doha. Furthermore, Thailand will host the Global IPE Conference (GIPEC) from 1st to 3rd November 2023. In collaboration with JICA, NHPE is carrying out these activities related to health workforce development.



Dr. Masato Izutsu, Chief Advisor, The Partnership Project for Global Health and Universal Health Coverage Phase 2 (JICA Project in Thailand)

Dr. Masato Izutsu, Chief Advisor of GLO+UHC Phase 2, JICA Project in Thailand, explained the overall goal of the project which is to strengthen the partnership between Thailand and Japan and to build the capacity on global health and UHC for Thailand and the region. As UHC is a broad concept, the project specifically addresses two pillars: health financing and health workforce. The GLO+UHC Project started in 2016, under the aforementioned concept.

He highlighted that the focus of this PMAC side meeting is the health workforce. Issues of the health workforce include general medical education, allocation strategy, the continued or in-service training, and as Prof. Wanicha mentioned, IPE, etc. Climate change is the one of the biggest threats to the public health in this century. Many people are suffering from climate-related disasters all over the world, especially in this region. Therefore, we need to focus on how the health workforce can prepare for climate change in order to safeguard the health of the greater population.

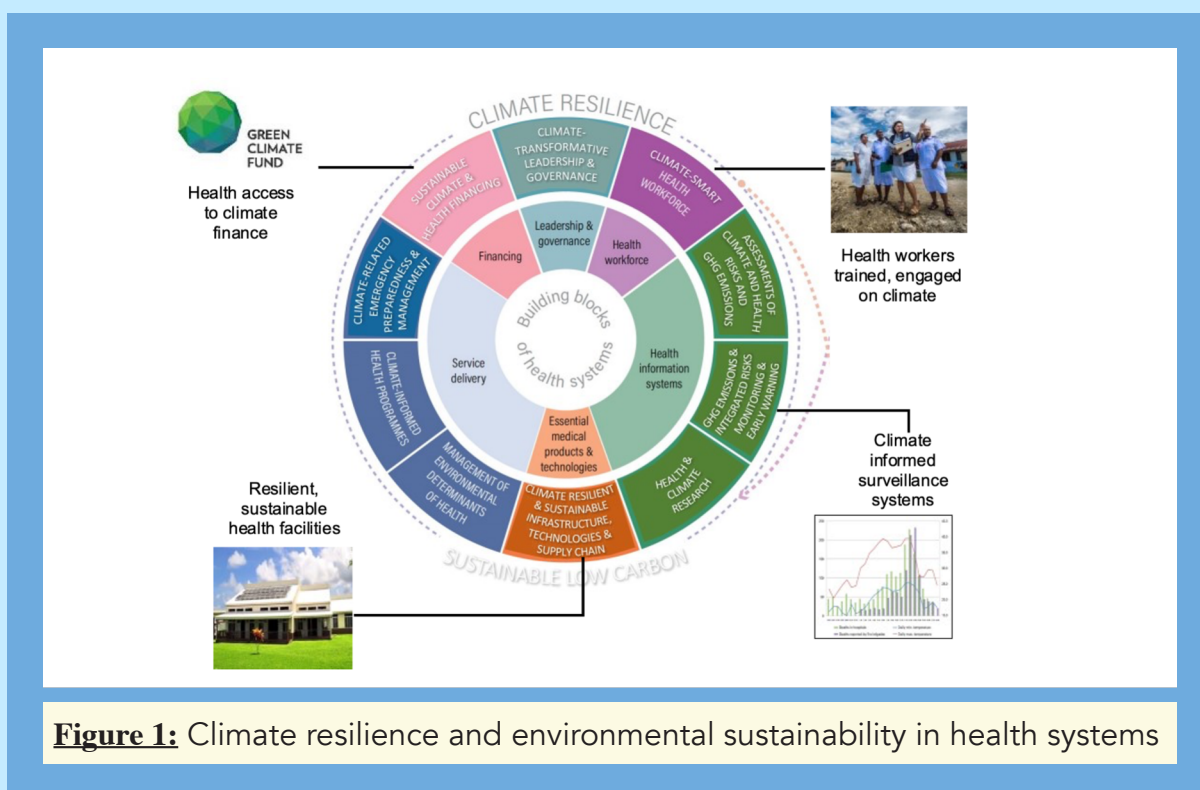


Session 1: WHO strategy on climate change, health and health workforce

Session 1 aimed to review the impact of climate change on health and the current situation of health professional development in the context of climate change and health under the WHO strategies.

(1) Overview of the impact of climate change on health and WHO global strategy on Health, environment, and climate change

Dr. Tedros Adhanom Ghebreyesus, Director-General of the WHO, said that climate change is part of prevention and promotion, however, prevention and promotion have always been undervalued in public health. To the audience hosted by Japan and Thailand, the true champions of Universal Health Coverage, it is clear that UHC, pandemic preparedness, and climate change are inseparable issues.



The impacts of climate change are diverse. Heat stress, more extreme floods and droughts, and their possible impacts on infectious diseases, air quality, and food systems, to name just a few. First, we must protect people against the most severe effects of climate change. To this end, the WHO has developed an operational framework titled the “WHO guidance for climate resilient and environmentally sustainable health care

facilities” (3) to build health systems that are resilient to climate change. Second, the resilience of health systems must be strengthened while reducing CO2 emissions from health systems. Third, the economy as a whole must reduce CO2 emissions: the WHO estimates that one person dies due to air pollution every five seconds. If countries meet the Paris Agreement’s global warming target of 1.5 or 2 degrees Celsius, WHO estimates that at least about 1 million lives could be saved each year.

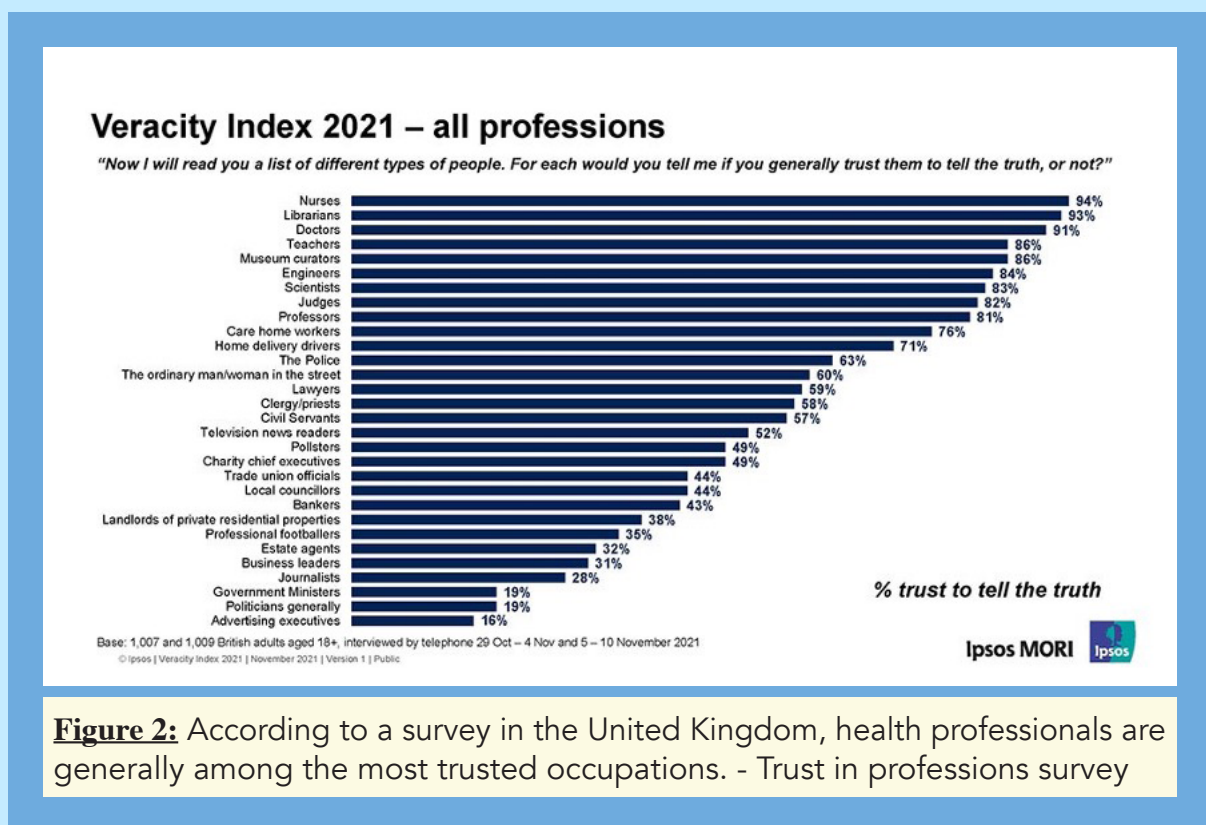


Figure 2: According to a survey in the United Kingdom, health professionals are generally among the most trusted occupations. - Trust in professions survey

Since health professionals are, in fact, the most trusted profession on the planet (4), WHO called on countries at COP27 to commit to conducting assessments, planning, for climate resilient, low-carbon health systems, and 62 countries signed this pledge. In June 2022, Alliance for Transformative Action on Climate and Health (ATACH) (5) was launched in order to support countries to make, and deliver on, ambitious commitments for climate resilience and health sector decarbonization. This is to be done through advocacy, technical support, knowledge sharing, monitoring & access to finance. Government leaders need to step forward and declare climate change, health, and human connections as priorities. Health professional associations and projects also need to make climate change a core part of their projects, and so does health civil society.

“It is important to put climate change at the center of the health system and promote leadership by health professionals.”



Dr. Diarmid Campbell-Lendrum

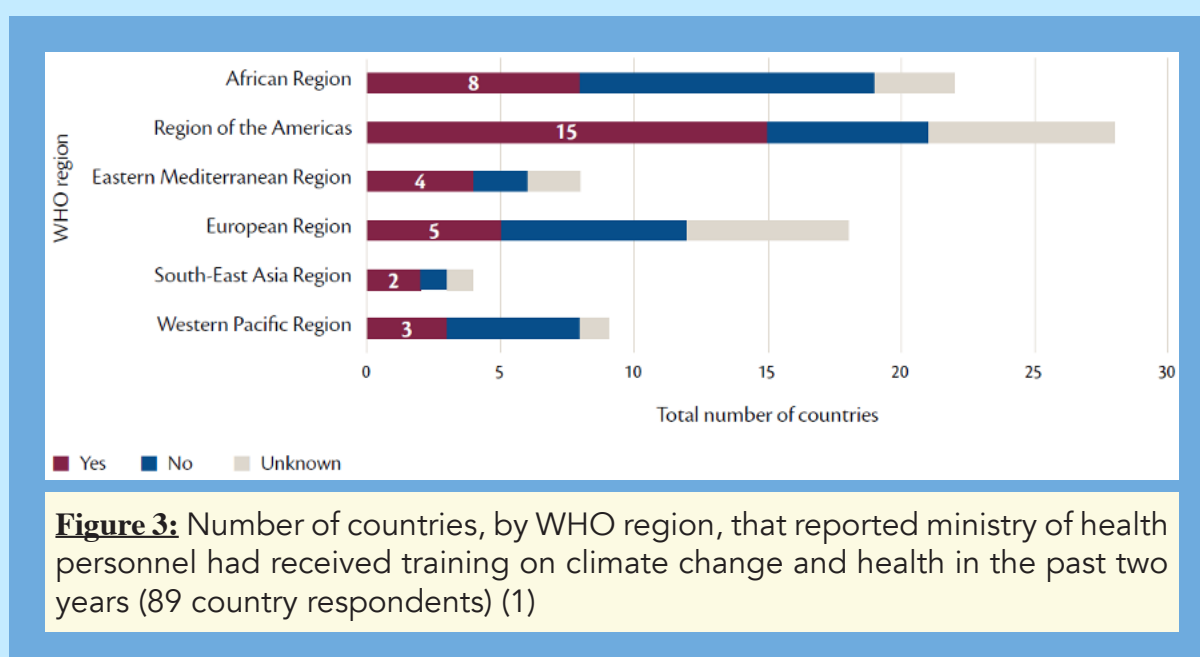
Head, Climate Change and Health, Department of Environment, Climate Change and Health, World Health Organization



“Decision about action on climate change will be developed by each country, and the strategies will be adapted to their own contexts. That is a lot of work, but if we focus on what we are concerned and what we are responsible for, we can fulfil our responsibilities.”

(2) WHO’s health workforce policy in the context of tackling climate change – development of health professional for climate change and health –

A global survey published in 2021 asked whether “health care workers have the opportunity to receive training on climate change,” 42% of the countries answered “yes,” but the actual training did not necessarily include climate change content. In addition to the WHO global strategy on health, environment and climate change (6), the WHO is active in shaping and promoting global policy for Human Resources for Health (HRH) but there is no explicit guidance on HRH and climate change. WHO describes, to strengthen health sector, leadership, governance and coordination roles for health managers, but not for health professionals. To fill this gap, the WHO has developed a more specific and definite list of competencies for health professionals at the global level. This includes climate change as part of preparing for and responding to the emergencies ahead.



The Western Pacific region, for example, has many small island nations that are vulnerable to the impacts of climate change. The priorities for the WHO Western Pacific Region are health security, Non-communicable Diseases (NCDs) and ageing, climate change and environmental health, and reaching the unreached. Commitments to mainstreaming climate change are clearly being heard from Pacific Island ministers, ministries of health, or heads of other ministries. In response to this trend, the region is revising its regional framework for human resource development strategies within their health sectors in an attempt to explicitly address climate change.

In terms of health professional development, we need significant support from the education sector to develop curricula that incorporate competencies in climate change education. Therefore, WPRO is creating a new regional HRH strategy focused on climate change and others to bridge the gap between the need to work across the health sector and the core competencies and development strategies.

“Developing a specific and well-defined list of competencies for health professionals working in the context of climate change is important”



Dr. Masahiro Zakoji

Technical Officer, Health Workforce Policy and Health Care Delivery, Health Policy and Service Design, Division of Health Systems and Services, Regional Office for the Western Pacific, World Health Organization



“We recognized the urgency of developing health workforce to respond to climate change. Most importantly, we are expecting WPRO’s work in finalizing core competencies for health workforce working in climate change.”



Session 2: Good practice and challenges to prepare health workforce development and education for climate change

Session 2 was aimed at sharing the experience and good practices that enable the healthcare workforce to prepare for health risks to population and/or systems caused by climate change. Speakers from the Philippines, Thailand, and the United States were invited.

(1) Preparing the health workforce for a warming planet: lessons from the Philippines and Southeast Asia

Since the Philippines is among the most vulnerable in Southeast Asia, it is imperative for Filipino health professionals to be prepared for the climate realities. Unfortunately, while public health in the past century has undoubtedly improved global health, this has been achieved at the expense of the planet. In other words, we have two patients now: people and the planet. This requires a radical expansion of the public health agenda and new training as environmental health professionals.



At the same time, we need a new cadre of health professionals who embrace uncertainty, surprise, and emergence, and who have the ability to collaborate with unfamiliar disciplines such as climatology or ecology. Based on the framework developed by the Planetary Health Alliance, if we want to develop the next generation

of health professionals who care not only for people, but also for the planet, we need to integrate “interconnection in within nature” into the heart of our education and training. We have established “Planetary and Global Health Program (PGHP)” at St. Luke’s Medical Center College of Medicine (7). We have designed a course that will resonate with health professionals and hospital administrators in low- and middle-income countries.

The next generation will be utilizing different types of teaching methods, including an online meeting application, and other multimedia. Students in the Philippines and other countries can learn about climate change together to bring planetary health to the clinical level. Fellowships, intercollegiate consortia, online courses and events are how we can approach integrating climate change into the education of health professionals in medical schools, or in nursing schools.

“In education, we need to develop health professionals who can deal with two kinds of patients: human and planet.”



Dr. Renzo R. Guinto

Inaugural Director, Planetary and Global Health Program, St. Luke’s Medical Center College of Medicine, Philippines

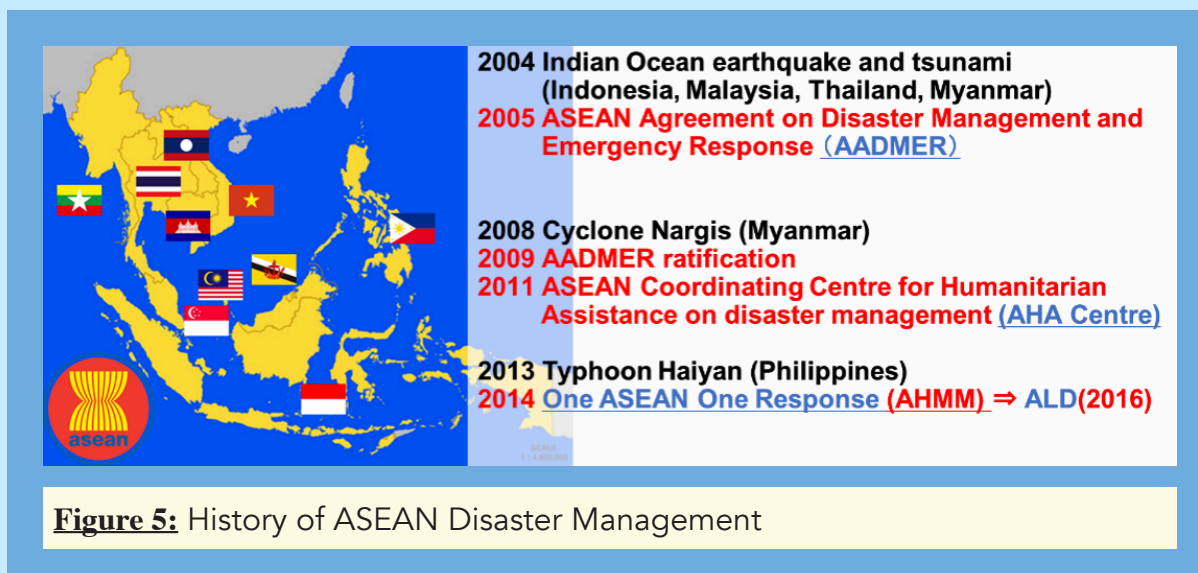


“We could see more clearly the progress in curriculum mapping about what should be put in the competency. I think it’s encouraging for the people to try to be another St. Luke’s to see what we can do to integrate the curriculum into our education system.”

(2) Development of regional capacity on disaster health management toward disaster resilient health system in the ASEAN region

The Association of Southeast Asian Nations (ASEAN) region has experienced major disasters every few years since 2000, such as an earthquake in Indonesia, a cyclone in Myanmar, and Typhoon Haiyan in the Philippines. During this period, ASEAN has been working on strengthening the disaster management system, including the development of the ASEAN Agreement on Disaster Management and Emergency Response (AADMER, 2005) (8) and establishment of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre).

JICA is supporting the implementation of the ASEAN Leaders' Declaration on Disaster Health Management (ALD on DHM) (9) and the Plan of Action (POA) to operationalize the ALD on DHM, through the Phase 2 Project for Strengthening the ASEAN Regional Capacity on Disaster Health Management (ARCH).



Since there weren't any explicit rules and guidelines on how to manage disaster medical response including deployment of Emergency Medical Teams (EMTs) in the ASEAN, it was necessary to develop a standard operating procedure with standard medical record form, various reporting forms and information system. How to apply them to actual disasters is also important. Member states are now beginning to develop international EMTs (I-EMTs) that can be deployed to other ASEAN regions, Thai EMT team was already accredited as WHO classified EMT and other 4 countries are trying to obtain the WHO accreditation on minimum standards for EMTs (10).

ARCH Project has also developed a standard curriculum for short-term training courses. Since disaster medicine is a very new field, it should not be organized in a single-nation silos, but taken as a golden opportunity to build commonalities in competencies and training from the outset. However, capacity is not only about human resources, but is to have a mechanism for human resources to work.

Thus, by promoting the exchange of human resources and sharing of knowledge and experience between Japan and the ASEAN region in the field of disaster medicine, ASEAN member countries can practice rapid, effective, and high-quality emergency medical activities under the slogan "One ASEAN, One Response" when a major disaster strikes.

“ASEAN is working together as a region to strengthen its ability to respond quickly, effectively, and with high quality to disaster health management.”



Mr. Shuichi Ikeda

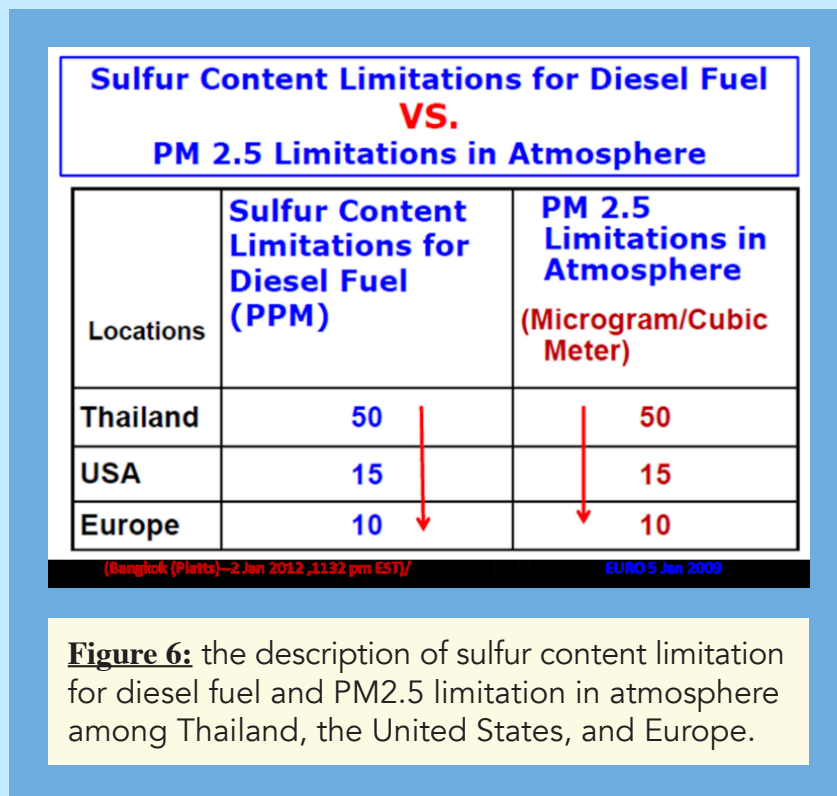
Chief Advisor, Project for Strengthening the ASEAN Regional Capacity on Disaster Health Management (ARCH), JICA Project in Thailand



“This network has been organized well, and there has been significant progress in health emergency responses at the ASEAN level. The Minister of Public Health, Thailand, Mr. Anutin Charnvirakul, supports and leads the network. I’m sure that we can cheer as we bring further progress to it in the future.”

(3) Overview of the connections between climate change on health effects and air pollutions

Climate change due to greenhouse gases (GHGs) will increase concentrations of air pollutants and degrade local air quality. Climate change due to GHGs will also lead to higher future temperatures and increased concentrations of PM2.5 in the air. Certainly, there is a link between the health effects of climate change and air pollution: PM2.5 can travel deep into the lungs or through blood vessels to the respiratory system.



Looking at the sulfur content limits for diesel fuel in different countries, Europe sets the standard at 10 ppm, the United States at 15 ppm, and Thailand at 50 ppm. Higher sulfur compounds in diesel fuel cause incomplete combustion of the fuel, resulting in higher PM 2.5 emissions on streets and highways. The United States and Europe remove sulfur compounds from diesel and store the solid sulfur compounds in refineries.

Therefore, the long-term policy that Thailand should implement is to reduce sulfur compounds from 50 ppm to 10 ppm, leading to a reduction of PM 2.5 in the atmosphere. As a short-term policy, Bangkok Metropolitan Area (BMA) should better enforce the installation of catalytic converters in the exhaust systems of older vehicles. Through these countermeasures, the black smoke of incomplete combustion (PM2.5, CO, NO_x, SO₂, and VOC) can be reduced significantly. The BMA may also be able to stop all of the agriculture burning activities in open field areas within its jurisdiction. Stopping or regulating times for major capital construction projects when PM2.5 exceeded standard high level in the atmosphere are also viable actions for the future.

“Air pollution is linked to the health effects of climate change, so both medium- and long-term efforts are needed.”



Dr. Payoungsak Kittikul

Environmental Expert for Global Manufacturing Knowledge
from Chevron USA, California, USA



“The excellent lecture with deep knowledge raised our awareness that climate change affects many things in many ways.”

Session 3: Panel discussion: Moving forward to scale up the health professional development

The last session was aimed to provide the avenue for emerging evidence, discussion and work to increase capacity for health professional education to deal with climate change and health. Mr. Nontakorn Siriwattanasatorn was invited to represent the next generation.



“What is the most important in response to climate change that affects the health service?”

The question to all speakers by Prof. Wanicha Chuenkongkaew

“As for the effects on climate, or climate change on the health, I think our speakers have underlined the effects on what could happen to our generations and our future generations, including the disaster, the indirect effects such as social determinants of health.”



Mr. Nontakorn Siriwattanasatorn

Vice-President for External Affairs, International Federation of Medical Students' Associations Thailand

“What I think is important is to incorporate youth into the decision making. First, youth can provide new perspectives and inputs, so we need a platform to express ourselves sufficiently. Second point is to put importance in the medical curriculum. Medical students need to know about what is going on with our world. Lastly, the youth are far more diverse than you would have thought. Thus, we need to include them in the decision making to be more diverse and inclusive.”

by Mr. Nontakorn Siriwattanasatorn



“I focused on the disasters in this side meeting. When we talk about disasters, the most important thing is predicting and anticipating future disasters. We want to say, “don't excuse disasters.” We have to remind policy makers and medical professionals to prepare for future big one which might be exceeding beyond their imaginations.”

by Mr. Shuichi Ikeda



“I am concerned about GHGs. We need to reduce GHGs because it is the cause of the temperature of this planet becoming hotter, the air pollution and the increase of PM 2.5 concentration. Thailand needs to put more efforts; use less electricity, minimize food waste, improve the usage of farmlands, etc. We also need to work more on the recycle system. A good picture is needed for a better future in Thailand.”

by Dr. Payoungsak Kittikul



“My answer sounds quite abstract, but I think the most important ingredient is “Hope.” My son is a climate activist and when I asked his opinion when I was writing a speech script for Dr Tedros (WHO Director-General), my son told me “Stop telling people how terrible it is. We all know that. You need give us some hope.” I believe that the hope is actually in the future.

A hope for the future is actually a city where you have good public transport, where you can walk and cycle to work, where people have healthy diets, etc. If we look at the changes, we need to make to address the climate crisis, they are really a positive future for health. I think that the younger generation gets the danger but should also get the hope. If you address the issue correctly, you will save money, the planet and people’s lives and you will get a positive vision of the future to look forward to.”

by Dr. Diarmid Campbell-Lendrum



“In order to create more hope, we need courage. We are tackling climate change which is an existential threat to our civilization, and this battle requires an enormous amount of courage from all of us including health professionals, advocates, etc. Even when we start creating the framework for the future of health professions’ education, there will be opponents, thus, we need courage to take actions. When we start creating new curricula, frameworks, standards for the future of health professional education, we need to make sure those who are not in this room, i.e., young people, indigenous peoples, etc., to be in this room. Indigenous people who are fighting to defend the forests and healthcare workers who are working in the community need to be in this room. In the future, as we embark on the action, we need to make sure these voices are represented, so that it encourages hope and also builds a sense of collective ownership.”

by Dr. Renzo R. Guinto



“We are not creating something from fresh. In terms of contents, if I look back 10 years ago, when I was a med student, I had learnt the same things, but maybe I was not paying enough attention and was not reflecting upon it as my own problem. We really need to give serious thought on how we can change, and it is good to have diverse perspectives as we have in this side meeting. We need to go back to the basics, and we are not starting from scratch, but we can build back on whatever we already have. We can take it as our own concerted challenge that we have to tackle as a team.”

by Dr. Masahiro Zakoji

In the wake of the side meeting, how do we think about scaling up health professional development to protect health from climate change? If we keep doing what we advocate, it will be sustainable and lead to a scaling up. We should try new things consistently and do not end up with just thinking of ideas. By keeping consistency and sustainability throughout our actions, if we care about how the planet is affecting the lives of our future generations, whether we are doctors, engineers, or whatever, we can do something about it. Unless all people and all societies are involved, this problem will never come close to a solution.



Conclusion



Session 1 highlighted that the impact of climate change on health and current situation of health professional development in the context of climate change and health. **Session 2** featured that share the experience and good practices in preparing the health workforce to meet the climate change related health risks to the population and health systems in the Philippines, Thailand, and the wider ASEAN region.

In **Session 3**, panelists acknowledged how important it is to involve all people and societies, such as the next generation, the indigenous peoples – who have already fought all their lives to protect our planet – or the frontline health workforce, to the decision-making process. Furthermore, incorporating climate change issues into health professional education was strongly encouraged, with ways to reduce the CO2 emissions from health system emphasized.

In conclusion, participants deepened their understanding of the global climate change situation, its implications on health, and how to scale up the health professional development. They gained knowledge on how to reinforce the health workforce to fight against climate change, and shared positive discussions on how to move forward to protect population health and our planet.

The panelists delivered a message that “The hope is in the future. Tackling climate change requires an enormous amount of courage as well. If we keep doing what we advocate, it will be sustainable and lead to a scaling up”. As we are truly concerned about our planet, we believe that everyone on the earth has a duty to fulfill. The GLO+UHC Project will apply the fruitful discussions of the side meeting to further activities, leading to more resilient UHC overall.

The GLO+UHC Project conducted this PMAC side meeting in collaboration with JICA, NHPE, NHSO, and MOPH, with the aim of strengthening health systems, and the health workforce in particular. We wish to have further collaboration towards the achievement of UHC based on the long-standing partnership between Thailand and Japan.

Acknowledgement

This proceedings covers the PMAC 2023 Side Meeting: “Scale up the health professional development to protect health from climate change”, organized in hybrid format at Lotus Suite 4 (50 participants), Centara Grand & Bangkok Convention Centre at Central World, Patumwan, Bangkok, Thailand on 23 January 2023. Development of the side meeting was mainly coordinated by GLO+UHC Phase 2 project team, NHPE team and NHSO team.

The proceedings were summarized by

- Dr. Marika Nomura, Special Advisor, JICA
- Ms. Meguru Yamamoto, Project Coordinator, GLO+UHC Phase 2, JICA
- Dr. Masato Izutsu, Chief Advisor, GLO+UHC Phase 2, JICA

and confirmed by

- Dr. Prasobsri Ungthavorn, Health Insurance Expert, NHSO
- Prof. Wanicha Chuenkongkaew, Secretary-General, NHPE
- Dr. Diarmid Campbell-Lendrum, Head, Climate Change and Health, Department of Environment, Climate Change and Health, WHO
- Dr. Masahiro Zakoji, Technical Officer, Health Workforce Policy and Health Care Delivery, Health Policy and Service Design, Division of Health Systems and Services, WPRO
- Dr. Renzo R. Guinto, Inaugural Director, Planetary and Global Health Program, St. Luke’s Medical Center College of Medicine
- Mr. Shuichi Ikeda, Chief Advisor, ARCH Project, JICA
- Dr. Payoungsak Kittikul, Environmental Expert for Global Manufacturing Knowledge from Chevron USA.

We’d like to express our special thanks to the speakers, panelists, moderators and all participants of the side meeting.

Co-organizers

- Ministry of Public Health (MOPH), Thailand
- National Health Security Office (NHSO), Thailand
- National Health Professional Education Foundation (NHPE), Thailand
- The Partnership Project for Global Health and Universal Health Coverage (GLO+UHC) Phase 2, Thailand (JICA Project)
- Japan International Cooperation Agency (JICA)

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Annex: Agenda

Time (GMT+7)	Agenda	Lecturer/Speaker
		Chair: Assoc. Prof. Dr. Prasobsri Ungthavorn, Health Insurance Expert, National Health Security Board member, Thailand
14:00-14:10	Opening	Presenter: Prof. Vicharn Panich, MD, Chairman of the International Award Committee of the Prince Mahidol Award Foundation, Thailand (Video recording)
14:10-14:25	Introduction of the theme and objectives of side meeting	Prof. Wanicha Chuenkongkaew, MD, Secretary-General, National Health Professional Education Foundation, Thailand Dr. Masato Izutsu, Chief Advisor, The Partnership Project for Global Health and Universal Health Coverage Phase 2, JICA's GLO+UHC2 project, Thailand
Session 1: WHO strategy on climate change, health and health workforce		
14:25-14:45	Overview of the impact of climate change on health and WHO global strategy on Health, environment, and climate change	Dr. Diarmid Campbell-Lendrum, Head, Climate Change and Health, Department of Environment, Climate Change and Health, World Health Organization
14:45-14:50	Short QA session	
14:50-15:10	WHO's health workforce policy in the context of tackling climate change - development of health professional for climate change and health -	Dr. Masahiro Zakoji, Technical Officer, Health Workforce Policy and Health Care Delivery, Health Policy and Service Design, Division of Health Systems and Services, Regional Office for the Western Pacific, World Health Organization
15:10-15:15	Short QA session	
15:15-15:30	Coffee break	
Session 2: Good practices to prepare health workforce for climate change		
15:30-15:45	Preparing the health workforce for a warming planet: lessons from the Philippines and Southeast Asia	Dr. Renzo R. Guinto, MD DrPH, Inaugural Director, Planetary and Global Health Program, St. Luke's Medical Center College of Medicine, Philippines
15:45-15:50	Short QA session	

Time (GMT+7)	Agenda	Lecturer/Speaker
15:50-16:05	Development of regional capacity on disaster health management toward disaster-resilient health system in the ASEAN	Mr. Shuichi Ikeda, Chief Advisor, Project for Strengthening the ASEAN Regional Capacity on Disaster Health Management, JICA's ARCH Project, Thailand
16:05-16:10	Short QA session	
16:10-16:25	Overview of the connections between climate change on health effects and air pollution	Dr. Payoungsak Kittikul, Environmental Expert for Global Manufacturing Knowledge from Chevron USA, California, USA
16:25-16:30	Short QA session	
Session 3: Panel discussion: Moving forward to scale up the health professional development		
(16:30-16:35)	(Preparation for panel discussion)	
16:35-17:20	Panel discussion	<p>Moderator:</p> <ul style="list-style-type: none"> • Assoc. Prof. Dr. Prasobsri Ungthavorn <p>Panelist:</p> <ul style="list-style-type: none"> • Dr. Diarmid Campbell-Lendrum • Dr. Masahiro Zakoji • Dr. Renzo R. Guinto • Mr. Shuichi Ikeda • Dr. Payoungsak Kittikul • Mr. Nontakorn Siriwattanasatorn, Vice-President for External Affairs, International Federation of Medical Students' Associations Thailand
17:20-17:30	Closing remarks & Group photo	Presenter: Mr. Kazuya Suzuki, Chief Representative, JICA Thailand Office

Resource Centers

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