PMAC | PRINCE MAHIDOL AWARD CONFERENCE 2021

PMAC 2021

COVID-19

Advancing Towards an Equitable and Healthy World

AUGUST 2020 - JANUARY 2021

PMAC PRINCE MAHIDOL AWARD CONFERENCE

COVID-19

ADVANCING TOWARDS
AN EQUITABLE AND HEALTHY WORLD

| BACKGROUND

The Prince Mahidol Award Conference (PMAC) is an annual gathering of global health experts to deliberate and forge a path for better health for the world population. The COVID-19 pandemic has defined the year 2020 and has challenged the collective might of the world in a myriad of ways. The new virus has infected every region of the world and currently, there is still no vaccine. As we observe, COVID-19 drastically changes the way we live and work, and it will also change political and economic order, regionally and globally. The pandemic poses challenges and questions on many fronts. It challenges government and health system responses, preparedness, and capacities all over the world. COVID-19 exposes government leadership and capacities in handling the pandemic and other issues entail with it.

COVID-19 has shown that it is not only technical preparedness that determines actual performance (arguably the countries hit most hard were better prepared as per JEEs and SPARs). Leadership, decision making, governance, decentralization matter. It also lays bare the implications of the prevailing economic order, economic and social inequalities and environmental crisis, raising questions about the nature of the post-COVID world. We also see diversity of policies, measures, innovations from different countries to tackle the disease leading to a vast diversity of success and failure, and we can learn from this and make progress. We should also learn on how society at large have performed during this crisis. Apart from present challenges, many questions toward the future emerge. For example, the questions of how to prevent future outbreaks of infectious diseases with pandemic potential, or what the world after COVID-19 will look like. These are the issues to be addressed at PMAC 2021.

This current pandemic is an opportune moment for PMAC 2021 to review, share lessons and provide feedback to each other in the global health community on how to prepare and respond more effectively, including those actions necessary to prevent and mitigate the impact of the next small-scale outbreak or Public Health Emergency of International Concern (PHEIC). PMAC 2021 will seek to address the issue of global health security and pandemic preparedness and response through the case study of the COVID-19 pandemic. More specifically, the conference will aim to: 1) Draw lessons from the national and international preparedness and response to the COVID-19 pandemic; 2) Assess the impact of the COVID-19 pandemic on health and non-health sectors and mitigation efforts; 3) Lay a roadmap and make action for a better-prepared, resilient and sustainable system for the next PHEIC and to ensure global health security.

Sub-Theme 1

What Has the World Learned from COVID-19 ?

SUB-THEME 1

What Has the World Learned from COVID-19 ?

Now that some countries have successfully managed to bring the first wave of COVID-19 under control, it is time to take an early look back and consider what could have been done differently to improve outcomes in all countries. In advance of COVID-19, a series of infectious threats --SARS, highly pathogenic avian influenza virus infection, MERS, and the first pandemic of the century, 2009 H1N1 influenza – had already established a pattern of potential but imminent pandemic emergence, and adoption of IHR(2005) by all Member States should have pushed development of core capacities for detection, reporting, and mitigation to the top of the priority list for national and international leaders and their communities. However, countries have often failed to deliver on this mandate due to other pressing priorities and, notably, a lack of financial commitment: response overrides preparedness. How did these lapses affect countries' readiness for and response to COVID-19? Sessions will address lessons learned so far -- and particularly what went well to improve preparedness for future events.

Since 2011 and the launch of the Pandemic Influenza Preparedness Framework, preparedness for the emergence of novel influenza viruses with pandemic potential has gained momentum. The PIPF approach was also considered generally adaptable to any other emerging respiratory viruses, including the hypothetical 'Disease X.' COVID-19 fits the Disease X paradigm perfectly, complemented as it is by the opportunities provided by the R&D Blueprint to add diagnostics, vaccines, and therapeutics. The core PIPF components have informed the COVID-19 response at national and global levels, including a whole-of-society approach, use of non-pharmaceutical public health interventions, the important role of communication, and the cross-sectoral partnerships among faith-based organizations, industries, labor/employers, and occupational and trade unions. The Global Influenza Surveillance and Response System (GISRS), covering 122 countries, has equipped countries with diagnostic capacity, along with the contributions of other major disease programs, e.g., HIV, TB, and malaria, that have enabled local laboratories to perform PCR tests for COVID-19 diagnosis.

In one of the first speeches after his appointment, Tedros Ghebreyesus, the WHO Director-General, noted that 'in an interconnected world, we are only as strong as our weakest link.' No country is safe if disease transmission is active in some parts of the world. COVID-19 hit the wealthiest countries hard, with effects far beyond health, while some middle- and lower middle-income countries managed to get their situations under control. In addition to the levels of pandemic preparedness, the disparities reflect the characteristics of the various health systems, such as emphasis on primary health care, extent of public funding for health care, public-private mix in healthcare delivery and adequacy of human resources in health. COVID-19 is confirming the importance of community engagement and ownership, and informed and community-supported self-directed health and hygiene behaviours of each individual in controlling the pandemic. 'Solidarity' has become a symbol of the COVID-19 response – from the global level and down to the grassroots. One remarkable achievement has been demonstrated in healthcare facilities. To save lives when the flood of patients was overwhelming hospitals and ICUs, national and international aid teams were sent – either voluntarily or through their organizations -- to create and maintain surge capacity.

Another issue to explore is the international connectivity among megacities and their roles as trade, traffic, and disease propagation hubs. As shown during SARS, the 2009 influenza pandemic, and this time again, when an emerging pathogen starts its global propagation, it hits the big cities first, then amplifies and spreads to other international hubs. These cities are often more connected to each other than to other places in the same country. Urbanization is another critical factor to explore if we want to prepare better for future epidemics and pandemics.

Finally, efforts are ongoing to identify the SARS-CoV-2 animal source, investigate the human-animal interface (HAI), and determine how this virus was introduced in humans. To manage and control the future risk of emergence of Disease X, the public health and human health security communities must further strengthen HAI work, including the environmental component (i.e., the 'One Health' approach)as well as the potential for deliberate or accidental release of engineered organisms (i.e., synthetic biology).

Thus, as we look to the near future, we will use this opportunity to identify the urgent problems yet to tackle and the ways in which we can and should augment readiness. Countries will be invited to relate their experiences with preparedness, containment, and mitigation during both the early phases of the pandemic and continuing as the situation evolves, as well as their assessment of the recovery measures implemented by governments. We will also examine the role and contributions of international organizations and communities in aiming to draw lessons for the world and lessons for countries.

Sub-Theme 2

How are we Dealing with COVID-19 ?

SUB-THEME 2

Background

The COVID-19 pandemic has undeniably challenged the status-quo of the world order. We will see its tremendous repercussions on health, lifestyles, economy, society, environment and others particularly over the next two to three years. Even as the world tries to deal with the pandemic, there are experiences that need to be shared and lessons that need to be learnt.

The trans-border nature of the virus highlights the need for collective actions and international cooperation. A globalized world advances international travel and transnational communication, but it also accelerates the spread of infectious disease such as COVID-19. Regional cooperation and multilateralism are essential at this time to ensure equitable distribution of resources. However we are seeing the disruption of regional cooperation in some parts of the world. We see some countries engage in philanthropic diplomacy, while others adopt more conservative and self- serving policies to manage the pandemic. The geopolitical impacts of COVID-19 also challenge the balance of power between the West and the East.

The interconnected global supply chain, once viewed as an asset, is now viewed with suspicion. The shortages of PPE, test kits etc. show just how precarious the supply chain is. Many countries have also used this as an opportunity to foster local innovation and production and global institutions need to promote this by facilitating free sharing of technology and knowledge. The issue of access to medical products for the prevention and treatment of COVID-19 remains, especially for poor people and poor countries remains.

While the pandemic underscores the importance of global and regional cooperation, it has also heightened the crisis in governance for health. The WHO is expected to play an important role in this crisis, with countries dependent on it for technical advice and guidance and many low-income countries dependent on it for supplies of medical products. It remains to be seen how it overcomes the current governance and funding crisis and is effectively able to support countries. In dealing with the pandemic, many countries have used the police force and coercion, and attacks on civil liberties have been on the rise. There are concerns related to transparency of Covid-19 data and privacy. The WHO and the UN Human Rights have stressed on the need for a human rights approach in dealing with the pandemic.

The health systems of most countries have struggled to respond to the crisis, though there are those that have shown exceptional resilience. The pandemic has once again brought to fore the importance of investing in public health, strong public health systems, comprehensive primary health care and the role of health workers and other frontline workers. However, health workers and other frontline workers in many countries have faced problems in accessing adequate protective equipment. There have been other challenges in dealing with the pandemic. Discourses by politicians in some countries contradict the established public health practices of restricted travel, physical and social distancing to curb the spread of diseases.

The implications of social determinants of health on people’s wellbeing have never been so starkly illustrated. Within countries, the pandemic has exacerbated inequalities, with the more vulnerable groups suffering either due to the disease or due to the steps taken to curb the pandemic. Migrant workers, refugees and asylum seekers, prisoners, indigenous communities, people of colour and ethnic minorities have especially borne the brunt of the crisis. Access of these groups and communities to healthcare has made them extremely vulnerable to deaths due to the disease. We are also seeing a humanitarian crisis in many countries, due to the lockdown which is affecting the poor, women and unorganized sector workers the most. The ensuing economic crisis has forced us to reconsider the current economic model.

This sessions will provide an opportunity to discuss how the international community is managing the pandemic. It will aim to provide evidence and insights on the role of governments and the global community in dealing with this crisis and its implications for the most vulnerable.

TOPICS TO BE COVERED

- How have health systems responded to the pandemic and what is the impact of COVID-19 on health systems?
- How is COVID-19 using and reshaping infectious disease/global health security governance and mechanisms?
- What has the experience of the pandemic shown in terms of the need for a new economic order?
- How has the pandemic brought focus to the social and economic determinants of health?
- How is the pandemic changing geopolitics, global supply chains, regionalism and multilateralism? How is this affecting supranational health-related actions?
- Which groups and communities have been most affected by the pandemic and its response and what have governments done to ameliorate the situation?
- What should a human rights based response to the pandemic look like? How close or far are countries from it?
- What are the issues we have to grapple with in the next 1-2 years and what needs to change right now? Examples of issues: production and distribution of vaccines and therapeutics, economic issues, access to housing and water, strengthening public health systems, social inequality and discrimination.

Sub-Theme 3

What Should We Do For The Future ?

SUB-THEME 3

Background

The ongoing COVID-19 pandemic has laid bare our collective weaknesses in being able to effectively respond to the emergence of a highly contagious and lethal microbial threat. Despite extraordinary advances over the past century in science and unprecedented improvement in global health standards, as evidenced by the COVID-19 pandemic, we still live in a world where the threat an infectious agent can emerge without warning and spread rapidly to every household and every community and every household without regard to national borders or to social and economic standing.

Over the course of the remainder of this century, the likely frequency of epidemics and pandemics will continue to increase, driven to a large extent by demographic trends, including urbanization, and environmental degradation and climate change, persistent social and economic inequalities, and globalized trade and travel. The burden of these diseases is not equally distributed across the world; the economically disenfranchised, displaced populations and people living with pre-existing conditions are disproportionately impacted.

Importantly, the drivers underlying the emergence of novel disease threats are complex human behaviors and their impact on animal populations and the environment are understood to be central to their emergence. Changing environmental and climatic conditions have been closely linked to the emergence of novel infectious diseases and the redistribution of those already existing. Their aggregate impact will continue to increase over the course of this century.

While the upgrading of the health security apparatus over the last decade has been welcomed COVID-19 underscores that these processes and institutional arrangements are not sufficient to responding to events like SARS-COV 2. Compliance with the International Health Regulations (2005), that provide a normative framework for surveillance, preparedness, notification and international support and coordination has also been shown to be inadequate. The experience of the COVID-19 pandemic underscores that new efforts need to be made to craft global strategies, policies and regulatory frameworks that more directly address the multi-sectoral aspects of disease emergence in order to improve our collective capacities to prevent, detect and respond to threats. Key is strengthening key multi-sectoral systems, increasing policy coherence, including in health technologies access and innovation, and reducing risks of new disease threats.

The failure of the world’s response to the COVID-19 pandemic, however, is not simply about the virus’s biology and its ecology, nor the inadequacies of our multi-sectoral partnerships. The erosion of support over the past decade for multilateral institutions and partnerships, a growing mistrust between citizens and their leaders, and the rise of “anti-science” have further complicated the ability of nations to mount an effective coordinated global response to global events like COVID-19. We need to thoughtfully examine the causes underlying these trends, including the expanding impact of social media, if we are to understand their contributions to the failure of an effective response to the COVID-19 pandemic; and based on this insight develop new strategies to re-invigorate our commitment to multilateral partnerships, build more trustful relationships between governments and their citizens, and re-affirm the centrality of evidence-based solutions to future threats.

IN THE FACE OF SUCH CHALLENGES, WE NEED A UNIFIED GLOBAL ACTION PLAN THAT

- Is built on a bold multilateral vision that embraces a commitment to address the multi-sectoral threats posed by emerging infectious diseases.
- is fully aligned and reinforcing of the commitments made in the 2030 Agenda for Sustainable Development, including to leave no one behind.
- facilitates full, universal and sustained compliance with the International Health Regulations of 2005.
- aggressively adopts strategies and approaches that recognize that our responses need to be as multisectoral as the forces underlying the emergence of new viral and microbial threats.
- removes the political, professional and cultural barriers, as well as the obstacles inherent within social, economic and political processes, that silo human health, animal health and the environmental sectors from effective multi-sectoral partnership, and at the same time reaches across the public and private sectors to fully harness their collective power for change.
- invests in building an evidence -base to improve our understanding of the drivers of diseases emergence, including climate change, environmental degradation and urbanization, and for tracking progress towards bringing control of these threats under control.
- reaches across the public and private sectors and civil society to fully harness their collective power for change, and invests in research to develop new, affordable, available and more effective countermeasures and health technologies to prevent, diagnose, treat and minimize the impact of these threats ensuring a full public return on public investments.
- invests in research and development to develop new and more effective countermeasures to minimize the impact of these threats.
- invests in strengthening the multi-sectoral systems required for the prevention, early detection and effective response and treatment to emerging infectious disease threats and anti-microbial resistance. The achievement of universal health coverage acknowledges these as fundamental.
- builds a workforce in all relevant fields, including in health, agriculture, food production and environmental sectors, that demonstrates the core competencies necessary tothe future challenges posed by these emerging threats.
- invests in the policies and financial resources essential to empower this workforce to be effective.
- realizes inclusive partnerships spanning global, regional, national-and community stakeholders that ensure strong coordinated and equitable action.

“INVESTING IN THE FUTURE: ENSURING THE WORLD WILL NEVER BE VULNERABLE TO ANOTHER “COVID-19” THREAT“ WILL FOCUS ITS WEBINAR SESSIONS ON ADDRESSING FIVE CRITICAL QUESTIONS

- What are the multi-sectoral systems and capacities required to “prevent, detect and respond” to future emerging threats?
- What policies, partnerships and investments are required to enable the success of these capabilities?
- How do we ensure that all populations have equitable access to critical, life-saving interventions?
- How do we make sure we build systems that are able to cope with future trends that will likely disrupt the worlds social, political and economic dynamics?
- How to maximally invest in advances in science and technologies to accelerate our ability to “prevent, detect and respond” to future threats

Sub-Theme 4

COVID-19 and the Global Megatrends

SUB-THEME 4

Background

The "COVID-19 moment" is poised to be a turning point for the world in terms of the megatrends of geopolitics, population, technology, climate change and environmental factors. The pandemic has underscored the importance of solidarity among nations and people even in a time when the disease requires isolation. It has also proven that action across society is possible when the objective is to save lives. This momentum must be maintained to enable people not merely to survive but to make healthy choices and lead healthy lives even without a global pandemic. Health is more than healthcare and preventing disease and promoting wellbeing should be a primary goal of any society.

Half the world's population is under 30. Youth must be properly represented and actively involved in solving today's complex problems, especially since these problems are related to their future and their work opportunities.

The unprecedented global health crisis we are facing is affecting all parts of society and changing lives and livelihoods. In all types of crises and times of need, from climate change to armed conflict or political unrest, young people and youth-led organizations have been quick to take action and respond, in particular due to inequalities and threatened human rights. The same is happening now during the COVID-19 pandemic.

While attention is currently focused on those most immediately affected by the virus, there are many indications that the COVID-19 pandemic will have long-lasting social, cultural, economic, political and multidimensional impacts on the whole of societies, including on young people, as highlighted by the Secretary General's Report "Shared Responsibility, Global Solidarity" (March 2020).

While a large portion of the world's resources will need to be redirected toward the fight against the virus and the post-pandemic recovery, youth development should remain a top priority. For the world to recover from the COVID-19 pandemic in a sustainable and equitable manner, young people need to be supported to reach their full potential and thrive.

Sessions will explore the effect of COVID-19 on megatrends.

The damage to health and well-being caused by the pandemic is substantial with profound social, economic and political consequences reshaping geopolitics and the global health architecture. There is a given strong need for global collaboration during a pandemic, to minimise the increased risk of threats against international peace and security and further deepening inequalities and poverty as probable consequences. Post COVID-19 must build on resilient green recovery, ensuring a peaceful society with social protection, embracing democratic constitutions, inter- and multidisciplinary collaboration, as well as multilateral institutions. The current crisis presents a number of policy windows- areas where there are clear challenges and solutions and where political will is growing. There are thus opportunities to build back better. The plenary will bring in lessons learnt from given megatrend effects by COVID-19 webinars and discuss Global Health Security in a post-COVID world.

With changing population dynamics, the world population is currently subjected to a larger, older, more mobile and concentrated population. While societal transitions and economic development have enhanced health they have also caused inequities, challenges and risks to people's health and well-being. The disease burden is evolving, with shifting causes of global mortality and a rising proportion of NCD related deaths, while simultaneously our way of living causes emerging infectious disease. Webinars will explore the effects COVID-19 has had on fertility and aging patterns, urbanisation and migration, as well as on health outcomes recognizing the interconnection between people, animals, plants, and their shared environment.

New technologies and early warning systems can be a game changer for health as they have brought about mayor health improvements; nevertheless they have triggered discussions around priorities, privacy, ethical challenges, equitable access and environmental consequences. Webinars will explore the shift in delivery of global health care through available healthcare technologies and advances in early warning systems.

Climate change and environmental effects bring about serious challenges to health, for example through extreme weather events which directly and indirectly affect people's health and well-being and create both acute challenges for the public health system and the need for long-term adaptation measures within society at large. While environmental and social determinants of health shape people's health and well-being, tackling determinants of health will require coordinated multisectoral actions using global and regional governance methods to address their systems dimension. Failing to consider health impacts or implications of the policies of non-health sectors, such as energy, agriculture and fishery, environment, transport, education and labor represent missed opportunities. Webinars will look at climate change impacting health and see to how we allow building back better regarding both adaptation and mitigation, with lessons learnt from the COVID-19 effects on greenhouse gas emissions.

A healthier tomorrow is possible. The pandemic has put health is at the center of attention for all mankind and proven that decisive action is not only needed but possible. It is both an opportunity and an obligation to act now to renew the global health agenda. The crisis can be used as a lever for transformative change.

| PLENARY SESSIONS

28 January 2021

14:00 - 14:40 UTC	KS | Keynote Speech by PMA Laureates

29 January 2021

12:00 - 13:30 UTC	Opening | The Opening Session of Prince Mahidol Award Conference 2021 & Armchair Conversation
14:00 - 15:00 UTC	PL0 | Politics, Political Economy, and History: Major Trends Shaping the COVID-19 Pandemic

30 January 2021

12:00 - 13:30 UTC	PL1 | What has the world learned from COVID-19?

31 January 2021

12:00 - 13:30 UTC	PL2 | How Are We Dealing with COVID-19?

01 February 2021

12:00 - 13:30 UTC	PL3 | Investing in the Future: Ensuring the World Will Never Be Vulnerable to Another 'COVID-19' Threat

02 February 2021

12:00 - 13:30 UTC	PL4 | Protecting and Improving Human and Planetary Health - A Syndemic View

03 February 2021

12:00 - 13:30 UTC	Synthesis Session | Synthesis: Summary, Conclusion & Recommendations

| WEBINAR SESSIONS

21 October 2020

11:00 - 12:30 UTC	WS204 | Forms of Discrimination, Social Exclusion with Specific Focus on Inequitable Impact of COVID-19 Pandemic

28 October 2020

12:00 - 13:30 UTC	WS205 | Resistance, Opportunities, and Threats During COVID Pandemic

29 October 2020

09:00 - 10:30 UTC	WS102 | Communication During Health Crises - Translating Sciences to Policy and Manage the Infodemic

04 November 2020

12:00 - 14:00 UTC	WS201 | Assessing the Situation of COVID-19 and International Trade and Health

05 November 2020

08:00 - 09:30 UTC	WS203 | Social Determinants of Health

05 November 2020

14:00 - 16:00 UTC	WS202 | Making International Intellectual Property and Trade Regimes Work to Address the Health Response to COVID-19

10 November 2020

11:00 - 12:30 UTC	WS206 | Governance for Health: Towards More Equitable Policy-making and Ethical Partnerships

11 November 2020

13:00 - 14:30 UTC	WS101 | The Socioeconomic Impact of COVID-19 from an Equity Perspective - Who is Being Left Behind and Lessons for the Future

12 November 2020

12:00 - 13:30 UTC	WS403 | Beyond Building Back Better - A Healthier and Greener World After The COVID-19

17 November 2020

12:00 - 13:15 UTC	WS301 | Accelerating Advances in Science and Technologies to "Prevent, Detect, Respond to and Recover From" Future Threats

19 November 2020

12:00 - 13:15 UTC	WS303 | Assuring Equitable Access to COVID19 Vaccines, Treatments, & Health Resources

26 November 2020

12:00 - 13:30 UTC	WS302 | Building Systems to Cope with Future Trends

01 December 2020

13:00 - 14:30 UTC	WS304 | Preventing, Detecting, Responding to and Recovering from Future Threats

03 December 2020

08:00 - 09:00 UTC	WS401 | The Future Society - Population Dynamics Following COVID-19

08 December 2020

12:00 - 13:30 UTC	WS103 | Lessons for Preparedness: Is There a Recipe for Success?

10 December 2020

13:00 - 14:15 UTC	WS305 | Investing in Pandemic Preparedness: Health Systems, Global Governance, Equity

14 December 2020

12:00 - 13:30 UTC	WS405 | Dealing with Disasters Fast and Slow: Health System Resilience for COVID-19 and Climate Change

15 December 2020

12:00 - 13:30 UTC	WS402 | The Lancet-SIGHT Commission on Peaceful Societies Through Health and Gender Equality - Health and Gender at the Intersection of Armed Conflict and the COVID-19 Pandemic

16 December 2020

12:00 - 13:30 UTC	WS207 | Immediate Health Response to COVID-19- A Test of Health Systems Resilience

13 January 2021

12:00 - 13:30 UTC	WS404 | Will the Healthcare Technologies From COVID-19 Lead to a Permanent Shift in How Global Healthcare is Delivered?

14 January 2021

12:00 - 13:30 UTC	WS104 | Governance for public health and pandemic preparedness: what have we learned since the beginning of the pandemic?

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KS

KEYNOTE SPEECH BY PMA LAUREATES

| KEYNOTE SPEAKER

- **Bernard Pécoul,** Founder and Executive Director, Drugs for Neglected Diseases initiative, (DNDi), Switzerland
- **Valentin Fuster,** Director, Mount Sinai Heart and Physician-in-Chief, The Mount Sinai Hospital, United States of America

PMAC | PRINCE MAHIDOL AWARD CONFERENCE

OPENING

THE OPENING SESSION OF PRINCE MAHIDOL AWARD CONFERENCE 2021 & ARMCHAIR CONVERSATION

| BACKGROUND

- Remarks by **Dr. Vicharn Panich**, Chair of the PMAC 2021 International Organizing Committee
- Opening Speech by **HRH Princess Maha Chakri Sirindhorn**
- Video of Prince Mahidol Award Foundation
- Video of PMAC 2021
- Opening Remarks by **Dr. Tedros Adhanom Ghebreyesus**, Director-General of WHO
- **Armchair Conversation**

| OPENING REMARK

- **Tedros Adhanom Ghebreyesus,** Director-General, World Health Organization, Switzerland

| MODERATOR

- **Fran Baum,** Co-Chair Global Steering Council,, People's Health Movement, Flinders University, Australia

| PANELIST

- **Tom Frieden,** President and CEO, Resolve to Save Lives, United States of America
- **Richard Horton,** Editor-in-Chief, The Lancet United Kingdom, United Kingdom
- **Margaret Chan,** Inaugural Dean, Vanke School of Public Health,, Tsinghua University, Emeritus Director General of World Health Organization, China
- **Anutin Charnvirakul,** Deputy Prime Minister and, Minister of Public Health, Thailand
- **Seth Berkley,** CEO, Gavi, The Vaccine Alliance, Switzerland
- **Jayati Ghosh,** Professor of Economics, Political Economy Research Institute, University of Massachusetts at Amherst, United States of America
- **Supakit Sirilak,** Director General, Department of Medical Sciences, Ministry of Public Health, Thailand

PMAC | PRINCE MAHIDOL AWARD CONFERENCE

PL0

POLITICS, POLITICAL ECONOMY, AND HISTORY: MAJOR TRENDS SHAPING THE COVID-19 PANDEMIC

| BACKGROUND

In contrast with common objectives in global health, including Universal Health Coverage, equitable access to services, and the advancement of wellbeing, the COVID-19 pandemic has revealed the world we have. It is not the one we want. Instead, the pandemic has revealed deeply engrained inequalities in risks, exposures, treatment, and outcome. Marginalized groups, including indigenous people, Black people, and ethnic and economic minorities have been found consistently to have the greatest risks of contracting COVID-19 and the worst outcomes as a result. Between nations, the common rhetoric of solidarity is undermined by competition for scare supplies and rivalrous secrecy around the commercial prospects for therapeutics and vaccines. Additional weaknesses in international cooperation are shown in the very limited learning from successful national responses, disparate reporting standards that frustrate comparisons, and disagreements about the role of the World Health Organization. For many in global health, these sad realities are made even more bitter by the knowledge that the general outlines of this pandemic have been forecast for years, and increasingly dire predictions and warnings went unheeded.

| OBJECTIVES

To frame discussions at PMAC 2021 Plenary Zero intends to encourage broad discussion of the forces that underpin poor world performance against COVID-19. These could include the following:

- **Historic lack of global cooperation on global health**
  Organized cooperation on global health dates to the mid 1800s, but it has always been secondary to commercial interests and political rivalries. These are manifested as limitations on health cooperation, such as politicizing and disempowering WHO through budgetary gamesmanship, or the refusal by member states to allow WHO to question national statistics or to exercise supranational authority.

- **The rise of neoliberalism**
  Particularly since the 1980s, donor governments and multilateral organizations have encouraged neoliberal policies in an attempt to make governments more efficient. On the surface, many related concepts such as value for money or impact evaluation are not controversial, and few would argue that state resources should be used inefficiently. However, there are many limitations to market-driven approaches to public health and medicine, as demonstrated by user fees and structural adjustment policies. Overall, neoliberal policies have promoted markets and weakened governments, leaving large vulnerabilities in areas requiring redistribution, coordination, and managing collective action challenges. These challenges are among the core justifications for government, and are critical aspects of pandemic preparation and response, but many governments have been too weak to be effective against COVID-19.

- **The tragedies of inequalities, climate change, people movements**
  The obstacles to controlling COVID-19 are similar to those at the core of many of the most significant global problems, such as climate change, mass migration, and persistent inequality. Limited solidarity, the absence of systematic redistribution, the inability to regulate trade-related health effects, and commercially oriented intellectual property rights regimes are common underpinnings in most global common goods problems.

- **The economic underpinning of zoonotic risk**
  As has been known for decades, and as is the case with COVID-19, many of the infectious human disease risks are zoonotic. A major obstacle to controlling these risks are the economic implications of doing so. At the center of these risks are the commercial production of meat and poultry and consumer demand for these and related foods. The significant implications for zoonoses and climate change have yet to be confronted.

- **The role of trade (who benefits, who does not)**
  Trade and disease are intimately connected by the shared transmission routes of goods and pathogens, and by the health consequences of ultra-processed food, tobacco, alcohol, and other products. The World Trade Organization does not allow trade restrictions on health grounds and few countries have had success protecting their citizens from products widely recognized as deleterious to health. Similarly, the disruption of trade due to the possibility of infectious disease transmission is very difficult. The uneven distribution of costs and benefits in trade-related health issues produces a complex political economy that has been resistant to the efforts of health advocates.

| MODERATOR

- **Kelley Lee,** Professor in Global Health Policy, Canada Research Chair in Global Health Governance, Faculty of Health Sciences, Simon Fraser University, Canada

| PANELIST

- **Sanjoy Bhattacharya,** Professor in the History of Medicine, Director of the Centre for Global Health Histories & Head of WHO Collaborating Centre for Global Health Histories, University of York, United Kingdom
- **Ronald Labonté,** Professor and Holder of the Distinguished Research Chair in Contemporary Globalization and Health Equity, University of Ottawa, Canada
- **Mariângela Batista Galvão Simão,** Assistant Director-General, Access to Medicines and Health Products, World Health Organization, Switzerland

PMAC PRINCE MAHIDOL AWARD CONFERENCE

PL1

WHAT HAS THE WORLD LEARNED FROM COVID-19?

| BACKGROUND

In one of the first speeches after his appointment, Tedros Ghebreyesus, the WHO Director-General, noted that 'in an interconnected world, we are only as strong as our weakest link.' No country is safe if disease transmission is active in some parts of the world. COVID-19 hit the wealthiest countries hard, with effects far beyond health, while some middle- and lower middle-income countries managed to get their situations under control. In addition to the levels of pandemic preparedness, the disparities reflect the characteristics of the various health systems, such as emphasis on primary health care, extent of public funding for health care, public-private mix in healthcare delivery and adequacy of human resources in health. COVID-19 is confirming the importance of community engagement and ownership, and informed and community-supported self-directed health and hygiene behaviours of each individual in controlling the pandemic. 'Solidarity' has become a symbol of the COVID-19 response – from the global level and down to the grassroots. One remarkable achievement has been demonstrated in healthcare facilities. To save lives when the flood of patients was overwhelming hospitals and ICUs, national and international aid teams were sent – either voluntarily or through their organizations -- to create and maintain surge capacity.

Now that some countries have successfully managed to bring the first wave of COVID-19 under control, it is time to take an early look back and consider what could have been done differently to improve outcomes in all countries. In advance of COVID-19, a series of infectious threats --SARS, highly pathogenic avian influenza virus infection, MERS, and the first pandemic of the century, 2009 H1N1 influenza – had already established a pattern of potential but imminent pandemic emergence, and adoption of IHR(2005) by all Member States should have pushed development of core capacities for detection, reporting, and mitigation to the top of the priority list for national and international leaders and their communities. However, countries have often failed to deliver on this mandate due to other pressing priorities and, notably, a lack of financial commitment: response overrides preparedness. How did these lapses affect countries' readiness for and response to COVID-19?

Webinar sessions under sub-theme 1 have addressed lessons learned so far in key areas such as governance, communication, socio-economic impact and readiness/preparedness of countries. Chairs of each webinars will discuss about the outcomes or their sessions and build together a framework to better manage future pandemics. The analytical framework will comprise a list of lessons learned and key actionable recommendations, translating collective experience into action.

| CHAIRS

- **David Heymann,** Professor of Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine, United Kingdom

| PANELIST

- **Ilona Kickbusch,** Chair of the International Advisory Board, Global Health Centre, the Graduate Institute of International and Development Studies, Switzerland
- **Sylvie Briand,** Director, Global Infectious Hazard Preparedness, World Health Organization, Switzerland
- **Mandeep Dhaliwal,** Director, HIV, Health and Development Group, United Nations Development Programme, United States of America
- **Ian Smith,** Head of Secretariat, Global Preparedness Monitoring Board, World Health Organization, Switzerland

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WS101

THE SOCIOECONOMIC IMPACT OF COVID-19 FROM AN EQUITY PERSPECTIVE - WHO IS BEING LEFT BEHIND AND LESSONS FOR THE FUTURE

| BACKGROUND

The COVID-19 pandemic is both a public health crisis and a development crisis. What started as a localized health outbreak has quickly turned into a global development crisis with unknown prospects on the extent of impacts in different areas of development and for different populations. Beyond the health consequences, policy measures designed to prevent, manage and contain COVID-19 have triggered far-reaching socio-economic challenges, which exacerbate the existing plights and inequalities and are likely to be widely felt for years to come. The pandemic is already reversing many years of development gains and poses a serious threat to the progress on the Sustainable Development Goals (SDGs).

The impact of the COVID-19 pandemic cuts across the SDGs with a significant risk of increasing the number of people to be left behind. For example, over 70 million people could be pushed back into extreme poverty in 2020, the first increase in global poverty since 1998 (relevant to SDG 1); the pandemic could force up to additional 132 million people into hunger this year (SDG 2); an unprecedented rise of domestic violence against women has been observed following the lockdown (SDG 5); the pandemic caused a 14% reduction in global working hours in Q2/2020, equivalent to 400 million full-time jobs, with disproportionate impacts on women, young and informal workers (SDG 11); and timely COVID-19 information and services as well as relief measures are often inaccessible for certain populations such as persons with disabilities and ethnic minorities (SDG 10); LGBTI people have been subjected to human rights abuses, violence or exclusion due to increased policing/surveillance, gender binary emergency measures, or the scapegoating of the LGBTI community for the COVID-19 spread (SDG 16).

Vulnerable populations are experiencing multiple socioeconomic challenges simultaneously. These socioeconomic impacts in turn increase people's exposure and vulnerability to COVID-19 and other health risks, fuelling and sustaining the vicious cycle with disproportionate short- and long-term consequences for vulnerable and marginalized populations.

On the other hand, the unprecedented circumstances brought by COVID-19 have created policy space and a social environment conducive to extraordinary measures and innovations that would not be possible in ordinary times. There are measures designed to protect people, particularly vulnerable populations, from both COVID-19 and socioeconomic risks and harms with pro-equity potentials. Examples include global efforts to ensure equitable access to COVID-19 health technologies, heightened policy debates on temporary basic income, temporary banning of the sale of tobacco and alcohol products, free provision of water and electricity in underserved communities, and the engagement of vulnerable groups into national COVID-19 decision-making processes, among others.

| OBJECTIVES

This session will explore the socioeconomic impacts of the COVID-19 pandemic particularly from an equity angle, examining who is being left behind and why, how heightened socioeconomic vulnerabilities and inequalities created barriers for effective COVID responses, lessons learned and emerging innovative thinking and measures to strengthen the resilience of the country and the vulnerable community in line with the PMAC 2021 theme of 'advancing an equitable and healthy world.'

| CHAIRS

- **Mandeep Dhaliwal,** Director, HIV, Health and Development Group, United Nations Development Programme, United States of America

| SPEAKER

- **Ola Abualghaib,** Manager, UN Partnership for the Rights of Persons with Disabilities, United States of America
- **Sabina Alkire,** Director, Oxford Poverty and Human Development Initiative, University of Oxford, United Kingdom
- **Sarojini Nadimpally,** Executive Director, SAMA / People's Health Movement, India
- **Natasha Howard,** Associate Professor, National University of Singapore/London School of Hygiene and Tropical Medicine, Singapore

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WS102

COMMUNICATION DURING HEALTH CRISES - TRANSLATING SCIENCES TO POLICY AND MANAGE THE INFODEMIC

| BACKGROUND

Communication during this COVID-19 pandemic has been particularly challenging. This is partly due to the increasing importance of social media and new technologies in the social fabric of our societies. The management of the infodemic (i.e., the overabundance of information that accompanies epidemics) requires more attention and specific interventions than in the past as fake news, scientific controversies, misinformation, and disinformation spread faster and further leading to mistrust towards institutions and science and to a negative impact on outbreak control. Communication is a broad issue that goes much beyond traditional messaging: it encompasses community engagement and empowerment and risk communication strategies as well as the interface between science and policy. This webinar will focus on lessons learned about the tools and transdisciplinary approaches that work to appropriately manage infodemics and to ensure a sustainable and effective societal response from translating science to policy.

| OBJECTIVES

- Address the following questions:

- How to effectively translate science to public health recommendations that will be followed by communities? How to convey the right information, at the right time, to the right audience, in the right format to ensure a right interpretation?

- How to ensure healthy science debates/controversies that do not undermine public trust in science?

- What would be effective approaches to tackle the multi-faceted aspects of infodemics?

- Extract 3 to 5 lessons learned regarding communication during epidemics/pandemics that will be used to develop a framework for the analysis of complex and multifaceted health crises.

| MODERATOR

- **Sarah Hess,** Technical Officer, World Health Organization, Switzerland

| SPEAKER

- **Jason Gale,** Senior Editor, Bloomberg News, Australia
- **Muge Cevik,** Clinical Lecturer, University of Saint Andrews, United Kingdom
- **Michael Ryan,** Executive Director, WHO Health Emergencies Programme, World Health Organization, Switzerland
- **Viroj Tangcharoensathien,** Senior Advisor, International Health Policy Program, Thailand
- **Sylvie Briand,** Director, Global Infectious Hazard Preparedness, World Health Organization, Switzerland

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WS103

LESSONS FOR PREPAREDNESS: IS THERE A RECIPE FOR SUCCESS?

| BACKGROUND

The global health community has been actively preparing for large-scale epidemics and pandemics for many years, often saying it was a "matter of when, not if." The SARS epidemic, 2009 H1N1 influenza pandemic, and West Africa Ebola epidemic have served as reminders of this threat, resulting in global action and commitment to cooperation through high-level meetings and resolutions, including the 2018 Prince Mahidol Conference's "A Call to Action on Making the World Safe from the Threats of Emerging Diseases." The COVID-19 pandemic has demonstrated that even with these preparedness efforts and investments, national responses can vary widely. Some countries were better able to leverage their previous preparedness efforts and investments and managed to rapidly implement successful public health response interventions and adapt existing systems. The Global Preparedness Monitoring Board has found that preparedness and subsequent resilience of societies can be broken down to five necessary and interconnected components, including responsible leadership, engaged citizens, agile systems, sustained financing and robust governance. The ongoing response to COVID-19 has provided a wealth of information and insight on how preparedness can be improved, recognizing that there will continue to be future threats of this nature.

Along the human dimension, preparedness requires both 1) responsive leadership that is based on transparent use of evolving evidence, a multisectoral, whole of society approach and a commitment to equity and social protection, and also 2) an engaged civil society that protect the vulnerable and keep leadership accountable. In addition, dependable and sustained financing (domestic and international) at the scale required for prevention and preparedness is critical to ensure the systems, human resources and commodities are planned and accessible when needed. Finally, preparedness requires having agile systems that can address the emergence of pathogens with pandemic potential; support open and transparent sharing of information on outbreaks and similar events; facilitate R&D and access to medical countermeasures; provide surge capacity for clinical and other essential supportive services; and provide social protection and safeguard the vulnerable.

The right metrics can help a country to track their progress and the gaps in its national preparedness systems and guide domestic and external investments. However, existing preparedness indices have failed to provide an accurate picture of national preparedness and to predict countries' response capabilities and resilience to global shocks such as the COVID-19 pandemic.

This webinar will examine the lessons learned from COVID-19 to date with regards to preparedness and how these lessons can be applied by practitioners, policy makers, and community leaders.

| OBJECTIVES

This session will explore the following topics:

- How can leadership and governance structures for preparedness be transformed to facilitate early decisive action by leaders, ensure the transparent use of evidence, and promote a multisectoral, whole of society approach to health emergency preparedness and response?
- How can leadership be responsive to communities and promote trust and equity?
- How can financing for preparedness be reformed so that it is sustainable, responsive, reliable and is available on the scale necessary to ensure that the critical components of preparedness are in place, both at the national and global level?
- What measures can be taken to ensure systems are more agile and to promote better coordination at the national, regional and global levels so that we improve early alert and information sharing; facilitate research and development, manufacturing, deployment and allocation of countermeasures; and strengthen supply chains?
- How can we adequately measure progress on these dimensions of preparedness?

| CHAIRS

- **Elhadj As Sy,** Co-Chair, Global Preparedness Monitoring Board, Senegal

| PANELIST

- **Maha El Rabbat,** Executive Director, Middle East and North Africa Health Policy Forum, Egypt
- **HH Tunku Intan Safinaz,** Chairwoman, Malaysian Red Crescent Society, Malaysia
- **Amanda McClelland,** Senior Vice President, Prevent Epidemics, Resolve to Save Lives, an Initiative of Vital Strategies, United States of America
- **Patrick Osewe,** Chief, Health Sector Group, Asian Development Bank, Philippines

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WS104

GOVERNANCE FOR PUBLIC HEALTH AND PANDEMIC PREPAREDNESS: WHAT HAVE WE LEARNED SINCE THE BEGINNING OF THE PANDEMIC?

| BACKGROUND

The COVID-19 pandemic affects societies at all levels – it is not unique to health. It has highlighted the need for specific governance patterns to ensure an efficient response to the epidemic while minimizing the collateral effects on other segments of society or the economy. Many countries are now thinking about the “after”, about building back better. We must reflect on what types of governance mechanisms are needed for pandemic preparedness and resilience at all levels: global, national and subnational – drawing the lessons from current structures, frameworks, responses and solutions. Identifying lessons learned from the first months of the pandemic is the first step before being able to think about creative innovative mechanisms for health and pandemic preparedness governance.

At the global level, the pandemic has highlighted the need for specific mechanisms such as public-private partnerships for the equitable access to essential supplies, diagnostics, treatments and vaccines. Questions are raised around emergence of nationalisms, limiting multilateralism approaches and the power given by States Parties to multilateral organizations. Another issue is that some recommendations by international organisations (such as the WHO) are not followed in times of emergencies, which could undermine trust and legitimacy of such organizations.

At national level, we witnessed lack of preparedness and ad-hoc nature of decision, even for countries with high preparedness index score. In times of unknowns and uncertainties, balancing health objectives and socio-economic impacts was difficult for many countries, of which some tried to “buy time” to strengthen readiness. There were some gaps in protecting some specific vulnerable populations and taking into consideration their needs and the disproportionate impact of the disease on them. This makes us reflect on what would be the appropriate levels of inclusiveness and multi-disciplinary needed for decision-making. Crises and emergency times may also be opportunities for governments to justify extreme measures and strong mechanisms must exist to fight corruption or abuse of authority. Ensuring state continuity is also often at stake during emergencies.

At subnational level, it would be important to understand what governance is most efficient to implement a whole of society approach at local level, including communities and private sector, and what would be ideal relationships between rural and urban areas. Regional cooperation mechanisms are also important to study.

At all levels, questions are raised around evidence-based policies, processes, systems, regulations and operations. Key recurring themes are inclusiveness, accountability, transparency, flexibility, effectiveness, trust and resilience. Another recurring issue we face at all levels is financing and the chronic underfunding and underinvestment in global health and pandemic preparedness.

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| OBJECTIVES

- Look at governance structure of international organizations, countries and sub-national entities during the first months of the COVID-19 pandemic
- Reflect on what would be effective governance structures and mechanisms to prepare for and respond to the multi-faceted aspects of epidemics and pandemics.
- Extract 3 to 5 lessons learned about governance at global, national and subnational levels that will be used to develop a framework to analyse complex and multifaceted health crises.

| MODERATOR

- **Ilona Kickbusch,** Chair of the International Advisory Board, Global Health Centre, the Graduate Institute of International and Development Studies, Switzerland

| SPEAKER

- **Yasuhiro Suzuki,** Board Member, Global Preparedness Monitoring Board, World Health Organization, Japan
- **Hans Henri P. Kluge,** Regional Director for Europe, World Health Organization, Switzerland
- **Magda Robalo,** High Commissioner for COVID-19, High Commission for COVID, Presidency of the Republic, Guinea-Bissau

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PL2

HOW ARE WE DEALING WITH COVID-19?

| BACKGROUND

The COVID-19 pandemic has undeniably challenged the status-quo of the world order. We will see its tremendous repercussions on health, lifestyles, economy, society, environment and others particularly over the next two to three years. Even as the world tries to deal with the pandemic, there are experiences that need to be shared and lessons that need to be learnt.

The trans-border nature of the virus highlights the need for collective actions and international cooperation. A globalized world advances international travel and transnational communication, but it also accelerates the spread of infectious disease such as COVID-19. Regional cooperation and multilateralism are essential at this time to ensure equitable distribution of resources. However we are seeing the disruption of regional cooperation in some parts of the world. We see some countries engage in philanthropic diplomacy, while others adopt more conservative and self-serving policies to manage the pandemic. The geopolitical impacts of COVID-19 also challenge the balance of power between the West and the East.

The interconnected global supply chain, once viewed as an asset, is now viewed with suspicion. The shortages of PPE, test kits etc. show just how precarious the supply chain is. Many countries have also used this as an opportunity to foster local innovation and production and global institutions need to promote this by facilitating free sharing of technology and knowledge. The issue of access to medical products for the prevention and treatment of COVID-19 remains, especially for poor people and poor countries.

While the pandemic underscores the importance of global and regional cooperation, it has also heightened the crisis in governance for health. The WHO is expected to play an important role in this crisis, with countries dependent on it for technical advice and guidance and many low-income countries dependent on it for supplies of medical products; at the same time WHO is facing a governance and funding crisis. In dealing with the pandemic, many countries have used the police force and coercion, and attacks on civil liberties have been on the rise. There are concerns related to transparency of COVID-19 data and privacy. The WHO and the UN Human Rights Council have stressed the need for a human rights approach in dealing with the pandemic.

The health systems of most countries have struggled to respond to the crisis, though there are those that have shown exceptional resilience. The pandemic has once again brought to fore the importance of investing in public health, strong public health systems, comprehensive primary health care and the role of health workers and other frontline workers. However, health workers and other frontline workers in many countries have faced problems in accessing adequate protective equipment. There have been other challenges in dealing with the pandemic. Discourses by politicians in some countries contradict the established public health practices of restricted travel, physical and social distancing to curb the spread of diseases.

The implications of social determinants of health on people's wellbeing have never been so starkly illustrated. Within countries, the pandemic has exacerbated inequalities, with the more vulnerable groups suffering either due to the disease or due to the steps taken to curb the pandemic. Migrant workers, refugees and asylum seekers, prisoners, indigenous communities, people of colour and ethnic minorities have especially borne the brunt of the crisis. Access of these groups and communities to healthcare has made them extremely vulnerable to deaths due to the disease. We are also seeing a humanitarian crisis in many countries, due to the lockdown which is affecting the poor, women and unorganized sector workers the most. The ensuing economic crisis has forced us to reconsider the current economic model.

This plenary will provide an opportunity to discuss how the international community is managing the pandemic. It will aim to provide evidence and insights on the role of governments and the global community in dealing with this crisis and its implications for the most vulnerable.

| OBJECTIVES

- How have health systems responded to the pandemic and what is the impact of COVID-19 on health systems? What has been the impact on non-Covid conditions?
- How is COVID-19 using and reshaping infectious disease/global health security governance and mechanisms? How are the global health ecosystem's governance and mechanisms adapting to COVID-19?
- What has the experience of the pandemic shown in terms of the need for a new economic order?
- How has the pandemic brought focus to the social and economic determinants of health? What have been the socio-economic impacts of the pandemic, with reference to vulnerable communities and special groups such as children?
- How is the pandemic changing geopolitics, global supply chains, regionalism and multilateralism? How is this affecting supranational health-related actions?
- Which groups and communities have been most affected by the pandemic and its response and what have governments done to ameliorate the situation?
- What should a human rights based response to the pandemic look like? How close or far are countries from it?
- What are the issues we have to grapple with in the next 1-2 years and what needs to change right now? Examples of issues: production and distribution of vaccines and therapeutics, economic issues, access to housing and water, strengthening public health systems, social inequality and discrimination.

| MODERATOR

- **Sulakshana Nandi,** Co-Chair, Global Steering Council, People's Health Movement, India

| PANELIST

- **Fran Baum,** Co-Chair Global Steering Council,, People’s Health Movement, Flinders University, Australia
- **Zafar Mirza,** Former State Minister of Health of Pakistan, Former Director Health System,, World Health Organization, Pakistan
- **Takao Toda,** Special Advisor to the President for Global Health and Human Security, Japan International Cooperation Agency, Japan
- **Charlotte Petri Gornitzka,** Deputy Executive Director, United Nations Children's Fund (UNICEF), Sweden
- **Bridget Lloyd,** Ex Global Coordinator, People's Health Movement, South Africa
- **Jos Vandelaer,** Director for Emergencies at the South East Asia Region, World Health Organization, Nepal

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WS201

ASSESSING THE SITUATION OF COVID-19 AND INTERNATIONAL TRADE AND HEALTH

| BACKGROUND

The COVID-19 pandemic brings numerous unexpected problems with wide impacts beyond health. Significant increase in demands of the healthcare services and relevant supplies in responding to the disease results in shortage of supplies worldwide. Temporary export restriction is immediately introduced in more than 80 countries which the top five products include face and eye protection, protective garments, gloves, sanitizer and disinfectants, pharmaceuticals[1]. Other countries take the utmost measurement with export prohibition on medical supplies, while some has a more subtle procedure with a licensing or permit requirements to export[2]. Undeniably, the domino effects cannot be avoided since no country has the ability to produce all the needed products, still an effort to alleviate the shortage problem for many countries is either by the reduction on tariff or suspension on certification requirement on their import aspect. However, suspension on commercial flights have spiked air fright prices as demand surges, still an increase in air freights cannot yet meet the capacity, while some borders remains open, land freight is being slow down due to complicated procedures which increase delay and costs. The restriction poses obstacles especially in pharmaceutical drug as China who is the key raw material suppliers and India who is the major producer for generic drugs lock down their countries[3] and other sites are shut down due to lack of raw materials or site affected the pandemic.

This imbalance of market mechanism disrupts global supply chain as countries trying to secure medical supplies and raw material shortage drive ups its price where payment terms of 50% upfront payment required, delivery delay as highest-paying customers move to the front and excessive mark-ups create new economic model that offer significant advantages to only those who can afford[4]. Smuggling of substandard medicine is another major issue to consider, especially in the poorer countries. The rising in demand, falling in supply and distracted regulators widen opportunities for substandard medicines as countries receive falsifies medicines supplies related to COVID-19[5], as well as poor quality medicines for diabetes, heart disease, depression, and rheumatism, cancer[6]. This subsequently adds burden to the health systems.

The process of work to prepare for this session is to commissioned expert(s) to review the situation and analyze the impact of international trade on health during COVID-19 especially access to medicine and medical devices. This commissioned paper will be provided as an input to the webinar discussion.

[1] https://www.wto.org/english/tratop_e/covid19_e/export_prohibitions_report_e.pdf

[2] https://www.macmap.org/en/covid19

[3] https://hub.jhu.edu/2020/04/06/goker-aydin-global-supply-chain/

[4]https://blogs.worldbank.org/health/covid-19-coronavirus-panic-buying-and-its-impact-global-health-supply-chains

[5] https://www.who.int/news-room/detail/31-03-2020-medical-product-alert-n-3-2020

[6] https://www.kcl.ac.uk/news/the-covid-19-pandemic-increases-the-chances-that-other-medicines-wont-work

| OBJECTIVES

To discuss the situation of COVID-19 and implication on international trade and health.

| MODERATOR

- **Manisha Shridhar,** WHO SEARO Regional Advisor, World Health Organization, India

| PANELIST

- **Katherine Bond,** Founder and Principal, Network Strategies for Health, United States of America
- **Andrew Hill,** Honorary Senior Research Fellow, University of Liverpool, United Kingdom
- **Sudarshan Jain,** Secretary General, The Indian Pharmaceutical Alliance, India
- **Ronald Labonté,** Professor and Holder of the Distinguished Research Chair in Contemporary Globalization and Health Equity, University of Ottawa, Canada

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WS202

MAKING INTERNATIONAL INTELLECTUAL PROPERTY AND TRADE REGIMES WORK TO ADDRESS THE HEALTH RESPONSE TO COVID-19

| BACKGROUND

The world was unprepared for COVID-19 despite other coronavirus outbreaks and despite multiple warnings from WHO and others. Although there was initial sharing of research among scientists and an unleashing of significant public, charitable, and private resources to expand medical supplies and to develop new medicines, vaccines, and diagnostics, the status quo of commercial control by the biopharmaceutical industry continues. Existing rules allowing private entities to monopolize the development, pricing, supply, and distribution of essential medical products have not been altered. And, the determination of rich countries to monopolize initial supplies remains unchanged. Inadequate global coordination mechanisms have left the equitable distribution of COVID-19 health products disarrayed. In place of open science and coordinated clinical trials, rational expansion of manufacturing capacity, and equitable global access, we have needlessly high prices, inadequate supplies, and nationalistic hoarding by the Global North. Despite these structural impediments to an effective, solidarity-based response to this unprecedented global pandemic, many countries are making best efforts to implement their own supply and access action plans. In addition, we have witnessed a number of global actions responding to the commercialization of the COVID-19 response, for instance:

- The Solidarity Call to Action, initiated by Costa Rica and now the COVID-19 Technology Access Pool (C-TAP)[1], which is the platform for sharing intellectual property on COVID-19 treatments, vaccines and health technologies.
- Resolution of the 73rd World Health Assembly on COVID-19 response[2], which calls for the efforts to control the COVID-19 pandemic, and for equitable access to and fair distribution of all essential health technologies and products to combat the virus.
- Medicine Patent Pool (MPP)has temporarily expanded its mandate to COVID-19 health technologies where licensing could facilitate innovation and access[3].
- Multiple partners created the Access to COVID-19 Tools Accelerator, which has committed to the repurposing or development of novel vaccines, therapeutics, and diagnostics and equitable global access to those tools, including in low- and middle-income countries.[4]
- Gavi launched a COVAX Facility and a Gavi Advance Market Commitment for COVID-19 Vaccines (GAVI Covax AMC), a new financing instrument aimed at incentivising vaccine manufacturers to produce sufficient quantities of eventual COVID-19 vaccines, and to ensure access for developing countries[5].

In addition, regional mechanisms are in place, such as in ASEAN where Ministers endorsed a setting up of a regional fund to respond to the COVID-19 pandemic[6]. At the country level, some countries issued compulsory licensing as part of COVID-19 response. For examples, Israel issued a compulsory license to import generic versions of lopinavir/ ritonavir (or Kaletra) while legislatures in Germany, Canada, Chile, and Ecuador laid the legal groundwork for the issuance of compulsory licenses to address COVID-19[7].

The commissioned paper will act as input to the webinar discussion in which the commissioned expert(s) is expected to provide recommendation based on the review government and international mechanisms to mitigate the false start in the medical response to the pandemic.

[1] https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov/covid-19-technology-access-pool

[2] https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_R1-en.pdf

[3] https://medicinespatentpool.org/news-publications-post/the-medicines-patent-pool-and-unitaid-respond-to-access-efforts-for-covid-19-treatments-and-technologies/

[4] https://www.who.int/initiatives/act-accelerator

[5] https://www.gavi.org/news/media-room/gavi-launches-innovative-financing-mechanism-access-covid-19-vaccines

[6] https://thediplomat.com/2020/04/asean-ministers-endorse-new-covid-19-response-fund/

[7] http://www.jogh.org/documents/issue202001/jogh-10-010358.htm

| OBJECTIVES

To discuss effective measures to better address health preparedness and the development, supply and equitable distribution of health products needed to address COVID-19 and future public health emergencies.

| MODERATOR

- **Ronald Labonté,** Professor and Holder of the Distinguished Research Chair in Contemporary Globalization and Health Equity, University of Ottawa, Canada

| PANELIST

- **Brook K. Baker,** Professor of Law, Northeastern University, United States of America
- **Marie-Paule Kieny,** Chair of the Board, Medicine Patent Pool, Switzerland
- **Suresh Jadhav,** Executive Director, Serum Institute India (SII), India
- **Greg Perry,** Assistant Director General, International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), Switzerland
- **Yuan Qiong HU,** Policy Co-coordinator & Senior Legal & Policy Advisor, Médecins Sans Frontières (MSF), Switzerland

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WS203

SOCIAL DETERMINANTS OF HEALTH

| BACKGROUND

The social determinants of health have been increasingly acknowledged as crucial to creating healthy populations particularly since the work of the WHO's Commission on the Social Determinants of Health and health equity (CSDH, 2008). This Commission conceptualised the social determinants as the conditions of everyday life and the ways in which the distribution of power and resources in society shape the distribution and nature of these conditions. Estimates are that the contribution of sectors outside health to population health outcomes outstrips the contribution from the health sector. The COVID pandemic has confirmed this as its impact has been felt most acutely by groups who lives are blighted because they experience all or some of factors such as living in unhealthy environments, having insecure jobs, poor housing, low income, being subjected to racism and have little access to education. These adverse socio-economic conditions are often experienced most by women, people with disabilities, people of colour and Indigenous peoples and most people in lower and middle income countries. The COVID-19 pandemic acted as a magnifying glass on these existing inequities, and has highlighted the larger pandemic of social and health inequities in health across the world. Mental health issues have been exacerbated especially in economically poorer countries linked with poverty, living conditions and lack of resources for taking precautions against Covid-19. There is huge stress on how to live with the virus in these circumstances and people are frustrated and angry with governments and the politics of Covid-19 response.

This session will also examine sectors beyond the health sector that will have a big impact on health in the post-COVID world and consider how different sectors can contribute to a post-COVID world which is fairer and more sustainable. It will take as its starting point the 2008 report of the WHO Commission on the Social Determinants of Health and ask for each sector covered in the report whether more can be done post-COVID to achieve the Commission's goal of closing the gap in life expectancy.

| OBJECTIVES

- Review of the evidence on health inequities globally and within selected countries
- Review of the trends in the distribution of wealth and power
- Contributions concerning changes that are needed in the following sectors: employment, housing, urban planning, welfare systems which will each look at examples of best practice and ask how this could be extended to other settings
- Anti-racism movements including Black Lives Matter protests and measures
- Proposals that would redistribute wealth (taxation reform (including progressive income tax, crack down on tax evasion)

| MODERATOR

- **Fran Baum,** Co-Chair Global Steering Council,, People’s Health Movement, Flinders University, Australia

| SPEAKER

- **Michael Marmot,** Director, Institute for Health Equity, UCL, United Kingdom
- **Dipa Sinha,** Assistant Professor, Dr. B.R. Ambedkar University, Delhi, India
- **Philippa Howden-Chapman,** Director, He Kainga Oranga/Housing and Health Research Programme; Director, New Zealand Centre for Sustainable Cities, University of Otago, New Zealand
- **Francesco Branca,** Director of the Department of Nutrition and Food Safety, WHO, Switzerland

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WS204

FORMS OF DISCRIMINATION, SOCIAL EXCLUSION WITH SPECIFIC FOCUS ON INEQUITABLE IMPACT OF COVID-19 PANDEMIC

| BACKGROUND

Almost everywhere in the world, certain groups of people more than others experience severe forms of deprivation and discrimination, violence, abuse and extortion, and even detention and incarceration (including arbitrary arrest) due to their race, ethnicity, religion, gender, age, citizenship status, or sexual orientation. Human mobility has increased significantly during the last two decades, as internally displaced or international migrants seek to escape wars, conflicts, ethnic persecution, political instability, armed violence, extreme poverty, income inequality, and, increasingly, climate change impacts. Many of these drivers of population movement originate in corporate practices (e.g., the continuing international arms trade), government policies (e.g., a proliferation of trade and investment agreements compromising livelihoods), and national and global failures to deal effectively with climate change. Extractivism has led to forced displacement and dispossession of indigenous communities all over the world. Many of those most affected by displacement or forced migration are women and children. Others face discrimination within their own countries and may seek migration or refugee status to avoid violence, including members of LGBTQ+ communities, or those discriminated against based on race, religion, ethnicity, or other minority differences. Aggravation

The COVID-19 pandemic has exacerbated these existing social exclusion and prejudice. People of color, people in lower-income households, indigenous communities, unauthorized migrants (especially those in detention centers), refugees and asylum seekers, and prisoners (including political prisoners) have experienced a higher burden of the pandemic. These vulnerable populations and socially excluded groups were heavily impacted in terms of higher prevalence of infections, higher severity of the disease, compromised access to healthcare services, and higher rates of deaths. Mental health impacts, and increase in gender-based violence and domestic violence have also been seen.

| OBJECTIVES

- Describe the forms of discrimination and social exclusion and violence against population groups due to their poverty, race, ethnicity, gender, age, citizenship status, and sexual orientation and the impact on people’s health and wellbeing.
- Identify the underlying political, economic, and social drivers of these forms of discrimination, social exclusion, and violence.
- Discuss the role of COVID-19 in exacerbating these forms of discrimination and the socioeconomic determinants that shape the COVID-19 response leading to these inequities.

| CHAIRS

- **Bridget Lloyd,** Ex Global Coordinator, People's Health Movement, South Africa

| MODERATOR

- **Ana Vracar,** Program Coordinator, Organization for Workers' Initiative and Democratization, Croatia

| PANELIST

- **Pat Anderson,** Chairperson, The Lowitja Institute, Australia
- **Carlos Van Der Laat,** Migrants Health Assistance Program Coordinator, International Organization for Migration (IOM), Switzerland
- **Aziz Rhali,** President, Moroccan Association for Human Rights, Morocco
- **Samer Jabbour,** Professor of Public Health Practice, Faculty of Health Sciences, American University of Beirut (AUB) Lebanon, Lebanon

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WS205

RESISTANCE, OPPORTUNITIES, AND THREATS DURING COVID PANDEMIC

| BACKGROUND

Almost everywhere in the world, certain groups of people more than others experience severe forms of deprivation and discrimination, violence, abuse and extortion, and even detention and incarceration (including arbitrary arrest) due to their race, ethnicity, religion, gender, age, citizenship status, or sexual orientation. Human mobility has increased significantly during the last two decades, as internally displaced or international migrants seek to escape wars, conflicts, ethnic persecution, political instability, armed violence, extreme poverty, income inequality, and, increasingly, climate change impacts. Many of these drivers of population movement originate in corporate practices (e.g., the continuing international arms trade), government policies (e.g., a proliferation of trade and investment agreements compromising livelihoods), and national and global failures to deal effectively with climate change. Extractivism has led to forced displacement and dispossession of indigenous communities all over the world. Many of those most affected by displacement or forced migration are women and children. Others face discrimination within their own countries and may seek migration or refugee status to avoid violence, including members of LGBTQ+ communities, or those discriminated against based on race, religion, ethnicity, or other minority differences. Aggravation

The COVID-19 pandemic has exacerbated these existing social exclusion and prejudice. People of color, people in lower-income households, indigenous communities, unauthorized migrants (especially those in detention centers), refugees and asylum seekers, and prisoners (including political prisoners) have experienced a higher burden of the pandemic. These vulnerable populations and socially excluded groups were heavily impacted in terms of higher prevalence of infections, higher severity of the disease, compromised access to healthcare services, and higher rates of deaths. Mental health impacts, and increase in gender-based violence and domestic violence have also been seen.

| OBJECTIVES

- Identify and describe forms of resistance in terms of enforced extraterritorial obligations, governmental policies, social movements. How may they be supported? What have been the opportunities and threats?
- Identify and discuss policy proposals to address social exclusion at different levels, calling upon the conference participants to adopt.

| CHAIRS

- **Maria Hamlin Zuniga,** Steering Council member, People's Health Movement, Nicaragua

| MODERATOR

- **Hani Serag,** Director of Programs, Center for Global and Community Health, University of Texas Medical Branch (UTMB), United States of America

| PANELIST

- **Vicki Gass,** Senior Policy Advisor for Central America and Mexico, Oxfam-America, United States of America
- **Alexis Benos,** Professor of Social Medicine & Primary Health Care, Aristotle University of Thessaloniki, Greece
- **Akihiro Seita,** Director, Health Department, United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), Jordan
- **Sarojini Nadimpally,** Executive Director, SAMA / People's Health Movement, India

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WS206

GOVERNANCE FOR HEALTH: TOWARDS MORE EQUITABLE POLICY-MAKING AND ETHICAL PARTNERSHIPS

| BACKGROUND

As with Ebola outbreaks in African countries, the global response, including international multilateral organizations and many of the world's governments to the COVID-19 pandemic is already raising critical questions about the ability of existing global governance mechanisms to respond effectively to global health crises on the scale of COVID-19 pandemic. This is intrinsically related to the nature of health governance that existed before the current pandemic started. The retreat by some countries from multilateralism, has created new challenges for health governance, especially during the pandemic. The issue of powerful countries cutting off funding support as a strategy to weaken global governance, such as the US with WHO, needs to be discussed and addressed.

At the same time, the rise in autocratic regimes and the increasing power of the corporate sector risks foreclosing space for broader forms of public/civil society participation in national policy-debates. In many countries there has been a lack of transparency in policy making and in engaging with non-state actors during the pandemic. Denialist tendencies of political regime in certain countries have led to a worsening of the pandemic. There are also issues related to the political regimes in some countries, where, in the name of public health intervention, there can be negative impacts on civil rights and the space for civil society voice and governance participation. Can health data be trusted in the face of a pandemic? What plans are there for governments to return to open and democratic forms of governance in the post-COVID era?

At an international level, there continues to be a mushrooming of global health partnerships that create more opportunities for non-state actors to participate in policy and program decision-making. As with the national level, such global partnerships can have positive health impacts, but there remain concerns that organizations representing private corporate or business interests can exert greater partnership influence (thanks to deep financial pockets) than international NGOs representing broader public interests. The increased engagement of established global institutions (notably those associated with the underfunded UN) with private sector organizations, including efforts to secure private sector ‘partnership’ financing, has led some civil society organizations to caution that we are witnessing the slow privatization of global governance. There are vibrant debates even during the pandemic, about how governance partnerships for health, both within and across nations, can become more equitable.

In this webinar we will assess governance for health in the context of the pandemic and discuss the way forward for more equitable policy-making and ethical partnerships both in the global and national contexts.

| OBJECTIVES

- How has (or might) COVID-19 lead to new forms of health internationalism/cooperation?
- How has COVID-19 affected national and international human rights (including right to health in various covenants or articles) and civil rights?
- What role has WHO played during the pandemic? How can WHO best fulfill its mandate to support COVID-19 response at county level?
- How has data been used to highlight inequity in COVID-19?
- What have been the challenges in data transparency and related policy making during COVID-19?
- What have been the ways in which the civil society has participated in and influenced health governance during COVID-19? How can it be improved?

| MODERATOR

- **Lauren Paremoer,** Lecturer, Department of Political Studies, University of Cape Town, South Africa

| PANELIST

- **David McCoy,** Professor of Global Public Health, the Centre for Primary Care and Public Health, Queen Mary University London, United Kingdom
- **Peter Singer,** Special Advisor to the Director General, World Health Organization, Switzerland
- **Ekbal Bappukunju,** Member, Kerala State Planning Board, Government of Kerala, India
- **Sasha Stevenson,** Head of Health, SECTION27, South Africa

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WS207

IMMEDIATE HEALTH RESPONSE TO COVID-19- A TEST OF HEALTH SYSTEMS RESILIENCE

| BACKGROUND

The global humanitarian landscape has changed considerably over the last decade, with increasing frequency and intensity of natural disasters, climate change-related events and infectious disease outbreaks threatening health security and social protection. More and more countries are dealing with multiple 'system shocks' due to overlapping disasters, challenging the capacity of health systems to respond adequately, and demonstrate 'systems resilience' in the face of such adversities. The ability to absorb, adapt, respond and recover positively, efficiently and effectively by individuals, communities, institutions and nations in the face of both anticipated and unanticipated risks is critical in curtailing economic and human losses, thereby protecting and sustaining development gains to achieve the 2030 Agenda.

There has been no greater test of our health systems resilience than the COVID-19 pandemic. The outbreak has had an unprecedented impact on countries worldwide, putting health systems under immense pressure to quickly contain the spread of the virus and limit the direct health impacts of the outbreak, stretching most beyond their capacity. The pandemic has revealed the various gaps in the levels of health systems preparedness across the world, highlighting the inadequacies of even those that have ranked high in the 2019 Global Health Security Index on their state of readiness for a major disease outbreak. Many of the top ten ranked countries on the GHS Index have become epicentres of the COVID-19 outbreak and have continued to experience a steady rise in caseloads and deaths throughout 2020. Health systems resilience can be achieved through effective governance. The pandemic has been a sensitive test of our systems' governance by revealing how decision-makers demonstrated transparency, risk aversion, collaboration and humility in their leadership styles.

National responses of health systems have varied dramatically in the face of the COVID-19 shock, with countries taking different approaches in testing, surveillance, information management, community engagement, and allocation of financial and human resources. Countries enforced social distancing, travel bans, quarantine, and isolation measures at varying degrees and across different timelines in the outbreak, affecting the trajectory of the spread of the virus both within and across borders. Community participation and engagement played an essential role in the collective response to the outbreak in many countries, improving compliance with public health measures and mobilizing a willing cadre of volunteers. The private sector also played a significant role in developing relevant and timely innovations such as tools for social distancing measures, digital solutions for contact tracing, or cost-effective personal protective equipment. Many countries struggled to ensure sufficient numbers of the trained and adequately protected health workforce to keep up with the demand, while others have had more success in quickly implementing alternative modalities of health service delivery such as phone consultations and telemedicine, demonstrating adaptability. Many countries struggled to carve out the number of infected populations, while some countries have struggled to balance the success in disease control with damaging consequences of such policies on the socioeconomic status of people.

| OBJECTIVES

Topics to be covered:

- What is health system resilience and how do we understand it across developed and developing countries?

- What factors can be associated with a pandemic response identified as having been more successful?

- In specific, what pivotal role has political leadership, crisis governance and global health architecture played in a 'successful response' and how do these factors impact health systems strengthening and resilience?

- What are the lessons learnt from the current pandemic response for strengthening health systems to tackle future catastrophic health events?

| MODERATOR

- **Borwornsom Leerapan,** Assistant Professor, Faculty of Medicine Ramathibodi Hospital, Mahidol Univeristy, Thailand

| PANELIST

- **Ren Minghui,** Assistant Director General for Communicable Diseases, WHO, Switzerland
- **Edwine Barasa,** Director, The KEMRI-Wellcome Trust Research Programme, Kenya
- **Sundararaman Thiagarajan,** Global Coordinator, PHM, India
- **Catherine Arsenault,** Research Associate, Department of Global Health and Population, Harvard University, United States of America
- **Nikki Gurley,** Monitoring, Evaluation, and Learning Officer, PATH, United States of America

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PL3

INVESTING IN THE FUTURE: ENSURING THE WORLD WILL NEVER BE VULNERABLE TO ANOTHER ‘COVID-19’ THREAT

| BACKGROUND

The ongoing COVID-19 pandemic has laid bare our collective weaknesses in being able to effectively respond to the emergence of a highly contagious and lethal microbial threat. Despite extraordinary advances over the past century in science and unprecedented improvement in global health standards, as evidenced by the COVID-19 pandemic, we still live in a world where the threat an infectious agent can emerge without warning and spread rapidly to every community and every household without regard to national borders or to social and economic standing.

Over the course of the remainder of this century, the likely frequency of epidemics and pandemics will continue to increase, driven to a large extent by demographic trends, including urbanization, and environmental degradation and climate change, persistent social and economic inequalities, and globalized trade and travel. The burden of these diseases is not equally distributed across the world; the economically disenfranchised, displaced populations and people living with pre-existing conditions are disproportionately impacted.

Importantly, the drivers underlying the emergence of novel disease threats are complex human behaviors and their impact on animal populations and the environment are understood to be central to their emergence. Changing environmental and climatic conditions have been closely linked to the emergence of novel infectious diseases and the redistribution of those already existing. Their aggregate impact will continue to increase.

While the upgrading of the health security apparatus over the last decade has been welcomed COVID-19 underscores that these processes and institutional arrangements are not sufficient to responding to events such as those caused by SARS-COV 2. Compliance with the International Health Regulations (2005) that provide a normative framework for surveillance, preparedness, notification and international support and coordination has also been shown to be inadequate. The experience of the COVID-19 pandemic underscores that new efforts need to be made to craft global strategies, policies and regulatory frameworks that more directly address the multi-sectoral aspects of disease emergence in order to improve our collective capacities to prevent, detect and respond to threats. Key is strengthening of multi-sectoral systems, increasing policy coherence, including in health technologies access and innovation, and reducing risks of new disease threats.

The failure of the world's response to the COVID-19 pandemic, however, is not simply about the virus's biology and its ecology, nor the inadequacies of our multi-sectoral partnerships. The erosion of support for multilateral institutions and partnerships, a growing mistrust between citizens and their leaders, the increase in 'nationalism' and the rise of "anti-science" have further complicated the ability of nations to mount an effective coordinated global response to global events like COVID-19. We need to thoughtfully examine the causes underlying these trends, including the expanding impact of social media, if we are to understand their impact on our inability to mount an effective response to the COVID-19 pandemic; and based on this insight we urgently need new strategies to re-invigorate our commitment to multilateral partnerships, build more trustful relationships between governments and their citizens, improve global solidarity and re-affirm the centrality of evidence-based solutions to future threats.

| OBJECTIVES

Plenary 3 will explore what strategies and actions are required to ensure the world is better prepared to prevent, detect, respond and recover from future emerging disease threats.

| MODERATOR

- **Dennis Carroll,** Chair, Leadership Board, Global Virome Project, Senior Advisor, Global Health Security, URC, United States of America
- **Subhash Morzaria,** Senior IIAD Fellow in Disease Prevention Institute for Infectious Animal Diseases, Texas A & M University, United Kingdom

| KEYNOTE SPEAKER

- **David Cameron,** Former Prime Minister of the United Kingdom, The Office of David Cameron, United Kingdom

| PANELIST

- **Timothy Mastro,** Chief Science Officer, FHI 360, United States of America
- **Ronald Waldman,** Professor of Global Health, Milken Institute School of Public Health, George Washington University, Portugal
- **Yik Ying Teo,** Dean, Saw Swee Hock School of Public Health, National University of Singapore, Singapore
- **Purnima Menon,** Senior Research Fellow, International Food Policy Research Institute (IFPRI), India
- **Nzisa Liku,** Consultant, Swiss Tropical and Public Health Institute, Kenya

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WS301

ACCELERATING ADVANCES IN SCIENCE AND TECHNOLOGIES TO "PREVENT, DETECT, RESPOND TO AND RECOVER FROM" FUTURE THREATS

| BACKGROUND

The COVID-19 pandemic has dramatically illustrated our collective vulnerability when we lack readily available biomedical countermeasures and interventions to control a novel threat. Our limited capacity to create these responses de novo compounds the problem. There is an urgent need to expand our knowledge about future viral threats BEFORE they directly threaten us, and to have in hand tools and capabilities to respond rapidly upon their onset. Our investments must move beyond advancing science and technology alone, but also focus on the processes and systems that link these advances to policy making. Despite extraordinary achievements over the past decades, particularly in the areas of genomics, big data and artificial intelligence, the sciences associated with pandemics and epidemics have largely remained outliers. We also lack understanding of the ecological and climate-related drivers that will contribute to future pandemics and/or epidemics. There have been few notable advances in our ability to forecast future outbreaks or reduce the likelihood of future 'spillovers', and early detection and rapid response remain great challenges. Globally, we still have an inadequate capabilities and capacities to generate new biomedical countermeasures and interventions that are broadly applicable across viral and bacterial populations and available prior to a pandemic and/or epidemic and readily available to support a rapid response.

| OBJECTIVES

This session will explore the following questions:

- How can key technologies that have a place in addressing epidemic and pandemic threats shift from their current reactive use to a far more proactive approach?
- What is the role of 'big data' and artificial intelligence in harnessing scientific innovation for forecasting and responding to pandemics and epidemics?
- What is the role of climate and weather as drivers of pandemics and/or epidemics, and how can we integrate climate and/or weather information and data into health tools or systems to prepare for future health challenges?
- What systems, processes and institutional capacities are required to ensure that advances made in scientific knowledge and technologies are appropriately incorporated into policies and practices for maximum impact?
- How can we collectively benefit and use evidence from research and development on diagnostics, vaccines, and therapeutics to improve their availability and accessibility for present and future threats?

| MODERATOR

- **Cecilia Oh,** Programme Advisor, HIV, Health and Development Group, UNDP, Thailand

| KEYNOTE SPEAKER

- **Sylvie Briand,** Director, Global Infectious Hazard Preparedness, World Health Organization, Switzerland

| SPEAKER

- **Nantasit Luangasanatip,** Post-Doctoral Researcher, Mahidol-Oxford Tropical Medicine Research Unit (MORU), Thailand
- **Naveen Rao,** Senior Vice President for Health, The Rockefeller Foundation, United States of America
- **Tegan Blaine,** Senior Climate Change Advisor and Climate Change Team Leader, Bureau for Africa, United States Agency for International Development (USAID), United States of America

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WS302

BUILDING SYSTEMS TO COPE WITH FUTURE TRENDS

| BACKGROUND

Changes in population demography come with opportunities and challenges. The projected growth of global human population to 10 billion by 2050 and to 12 billion by the end of the century is expected to exert unprecedented pressure on human and ecological systems, increasing the demand on energy consumption, animal-based foods, global mobility, and the near universal penetration of the “internet of things”. This immense pressure can also be felt in the ecological and climate shifts arising from the relentless exploitation of natural resources, increasing the risk of fragile and failed systems worldwide. However, the world continues to address these demand increases in a unilateral manner, overlooking the interconnectedness of systems and the resultant impact. A clear example is the threat to Global Health Security from the relentless demand growth, where global mobility propagates the specter of emerging and re-emerging infections to all parts of the world, threatening food and medical supply chains, destroying economies and livelihoods, as well as disintegrating equity, trust and social capital in communities and societies.

At the heart of the response to these looming perils is the need to build systems that are integrated, interconnected and information-driven. The ability or inability for global communities, governments and health systems to respond during a crisis is a direct function of the investments and preparations made during “peace time”. Rapidly-convened systems to handle emerging national and global threats rarely address fundamental issues such as equity, efficacy and efficiency.

For a start, the role of public policy making has to be grounded in evidence and science, particularly in the implementation and behavioral sciences to understand the impact and acceptability to individuals and communities. Partnerships between government, academia, industry, and civil societies necessarily sit at the core of a system-level approach to preparing and finding solutions for present and future crises.

| OBJECTIVES

This session aims to outline the building blocks of a systems-level approach to forecast and tackle challenges that emerge as a result of shifting trends, going beyond the health system to a whole-of-government and whole-of-society systems approach. The thesis will focus on: (1) how will trust and social capital between governments and people be built during “peace time” in such systems, to increase the resilience of the entire system in a country to disruptions due to a national crisis? (2) how can public policies be made using a systems-level consideration that integrates information and insights from academia, civil societies, government and industry to ensure equity, efficacy and efficiency? (3) how will the advent of “internet of things” solutions protect the paradigms of confidentiality and privacy, especially when communal benefits during a crisis may be perceived to trump individual liberties? (4) what is the role of systems-level public policy making for averting known and looming crises, such as increasing climate resilience at both national and global levels?

| MODERATOR

- **Yik Ying Teo,** Dean, Saw Swee Hock School of Public Health, National University of Singapore, Singapore

| PANELIST

- **Dale Fisher,** Professor, National University of Singapore, Singapore
- **Supreda Adulyanon,** Chief Executive Officer, Thai Health Promotion Foundation, Thailand
- **Fernanda Zermoglio,** Adaptation and Vulnerability Specialist, United States Agency for International Development, United States of America
- **Diarmid Campbell-Lendrum,** Head, Climate Change Unit, World Health Organization, Switzerland
- **Mary Amuyunzu-Nyamongo,** Executive Director and Founder, African Institute for Health and Development, Kenya

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WS303

ASSURING EQUITABLE ACCESS TO COVID19 VACCINES, TREATMENTS, & HEALTH RESOURCES

| BACKGROUND

The COVID-19 pandemic has provided a stark window into the how social and economic inequities result in disproportionate risk and impact of novel diseases. The chronic lack of access to basic health care prior to a pandemic results in populations more likely to be living with “pre-existing conditions” that make them more vulnerable to the most serious consequences of a novel infectious disease. This lack of effective health services in marginalized communities further increases their risks of negative outcomes during the pandemic. Economic inequities also profoundly reduce timely access to diagnostics and life-saving medicines (i.e. vaccines and therapies) – once they become available. This dynamic is particularly evident between resource “rich” and “poor” countries when it comes to accessing life-saving products that are in high demand when supplies are limited, including vaccines, therapeutics and personal protective equipment. These inequalities underscore the importance of universal health coverage in developing a uniformly healthy population before a pandemic, and mechanisms being in place for equitable provision of vaccines, therapies and PPEs during a pandemic. Moreover, vulerable populations will be impacted by pandemic induced impacts on education and nutrition programs. Topics to be discussed in this session include:

- Impact of inequitable access to basic health services on population health profile
- Global access to treatments and vaccines. How effective treatments and vaccines will be made available to everyone who needs them.
- The role of Universal Health Coverage in building: healthier populations (with fewer underlying conditions) that are less vulnerable to infectious disease threats; normative health systems and capacities that ensure delivery of critical services in the face of a pandemic
- How we ethically address access to therapeutics and vaccines? COVID vaccine development will be a major issue and there are also issues of the lack of ‘true partnership’ between funders and organizers around the world. How are major powers weighing in on this?
- How to ensure a unified global health approach, including access to education and nutriion, to address the most vulnerable in the world.
- How the growing power struggles between key countries on commodities affect equitable access to life saving interventions?

| OBJECTIVES

By participating in this webinar with global experts you will:

- Learn about the concerted effort to assure equitable global access to COVID19 vaccines and life-saving therapeutics
- Gain insight into the ethical considerations in rationing and prioritizing resources
- Understand the importance of nutrition, especially for vulnerable populations

| MODERATOR

- **Helen Rees,** Executive Director, Wits Reproductive Health and HIV Institute, University of Witwatersrand, South Africa

| PANELIST

- **Timothy Mastro,** Chief Science Officer, FHI 360, United States of America

| SPEAKER

- **Mercy Mwangangi,** Chief Administrative Secretary for Health, Ministry of Health, Kenya
- **Supakit Sirilak,** Director General, Department of Medical Sciences, Ministry of Public Health, Thailand
- **Kanchanok Sirison,** Project Associate, Health Intervention and Technology Assessment Program (HITAP), Thailand
- **Purnima Menon,** Senior Research Fellow, International Food Policy Research Institute (IFPRI), India

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WS304

PREVENTING, DETECTING, RESPONDING TO AND RECOVERING FROM FUTURE THREATS

| BACKGROUND

A. Problem Statement

COVID 19 has shown that pandemic can emerge any time, any place and with unpredictable results. It underlines the fundamental problem of the inability of the global community to be able to forecast the emergence of new disease threats, to prevent their emergence and response rapidly if they do.

Pre-requisites in being able to forecast and mitigate the impacts of new high impact viral pathogens are:

- Prior knowledge of the zoonotic viruses that are present in the wild life population.
- The capacity to detection early spill over events.
- Criteria, mechanisms and decision support system to eliminate new incursions in humans and/or their livestock before they cause any harm locally, regionally and globally

B. Addressing the problem and challenges

In order to address these three areas this session will explore the following:

- Systems and capacities required for routine, monitoring of new zoonotic pathogens spanning wild life, livestock and human populations
- Drivers and risks that generate “hot-spots” of new viral spill over events and their spread
- Socio-economics, data analysis, risk assessment, forecasting, refining hot spots and developing evidence-based policies underpinned by appropriate international, regional and national level endorsement and financial resources.

Overview

The COVID-19 pandemic underscores the urgent need to transform our public health culture from one that responds to the latest outbreak, to one that is better able to prevent the spillover of new viruses, detect them immediately when they do, and preposition far more effective biomedical and non-biomedical countermeasures and the systems for their delivery to respond to and build back better from future outbreaks should they occur. This power to “prevent, detect, respond to and recover from” will protect against not only human infections but similarly protect livestock animal populations which share our vulnerability to emerging viral threats, and by extension protect against the devastating effects viral threats can have on global food security and livelihoods of farming communities of the world. The COVID-19 pandemic underscores the urgent need to transform our public health culture from one that responds to the latest outbreak, to one that is better able to prevent the spillover of new viruses, detect them immediately when they do, and preposition far more effective biomedical and non-biomedical countermeasures and the systems for their delivery to respond to and build back better from future outbreaks should they occur. This power to “prevent, detect, respond to and recover from” will protect against not only human infections but similarly protect livestock animal populations which share our vulnerability to emerging viral threats, and by extension protect against the devastating effects viral threats can have on global food security and livelihoods of farming communities of the world.

| OBJECTIVES

This session will discuss what is required to:

- Better characterize the global genetic makeup of viruses (virome) and other organisms with pandemic potential
- Ensure sustainable monitoring of spillover hotspots for early detection of emerging threats
- Target the animal-human interface to prevent future spillovers
- Build a more comprehensive ecologic database of potential viral and other organism threats while they are still circulating in animals to better predict future threats
- Transform the sciences of virology and bacteriology into big data sciences by generating a detailed genetic and ecologic profile of high consequence families
- Strengthen health systems' capacities for early detection and containment of novel threats
- Develop and maintain sustainable public health and health care preparedness and response capabilities
- Build enhanced forecasting abilities for disease emergence, including a better understanding how the environment and a changing climate can contribute to emergence of threats and simultaneously decrease the ability to cope with a threat.

| MODERATOR

- **Subhash Morzaria,** Senior IIAD Fellow in Disease Prevention Institute for Infectious Animal Diseases, Texas A & M University, United Kingdom

| PANELIST

- **Christine Kreuder Johnson,** Director, EpiCenter for Disease Dynamics, University of California Davis, United States of America
- **Benjamin Oppenheim,** Vice President, Product, Policy and Partnerships, Metabiota, United States of America
- **Dennis Carroll,** Chair, Leadership Board, Global Virome Project, Senior Advisor, Global Health Security, URC, United States of America

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WS305

INVESTING IN PANDEMIC PREPAREDNESS: HEALTH SYSTEMS, GLOBAL GOVERNANCE, EQUITY

| BACKGROUND

The spread of SARS-COV 2 has highlighted three major problem areas in the current global health security system: the weakness of some health systems and their inability to implement urgent public health and clinical priorities; the fractured state of national, regional and global partnerships and associations that had previously been central to coordinating responses to past global health crises and, with it, the surprising impact of weak and/or incompetent political leadership on communicable disease control; and the consequences of allowing major structural inequities in the distribution of health and health care, to persist and to fester.

| OBJECTIVES

1. This session will highlight three leading areas of deficiency that have been exposed by the COVID pandemic.

2. Participants will hear from experts regarding the need to invest in health systems, in global health governance, and in equity

3. Participants will have the opportunity to ask pointed question to the presenters and moderator on these topics

| MODERATOR

- **Ronald Waldman,** Professor of Global Health, Milken Institute School of Public Health, George Washington University, Portugal

| PANELIST

- **Louise Ivers,** Executive Director, Massachussetts General Hospital Center for Global Health, United States of America
- **Ahmed E. Ogwell Ouma,** Deputy Director, Africa Centres for Disease Control and Prevention (Africa CDC), Ethiopia
- **Ole Petter Ottersen,** President, Karolinska Institutet, Sweden

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PL4

PROTECTING AND IMPROVING HUMAN AND PLANETARY HEALTH - A SYNDEMIC VIEW

| BACKGROUND

The "COVID-19 moment" is poised to be a turning point for the world in terms of the megatrends of population, technology, climate change, environmental factors, geopolitics, conflict and gender. Economic inequities continue to worsen, alongside with other megatrends, demonstrating a clear alteration of the geopolitical situation.

Under the subtheme 4, "COVID-19 and the Global Megatrends", the webinar series has highlighted questions on how to create a green, healthy and more peaceful society. The webinar series have discussed the linkages and syndemics across climate change, environment, food systems and health, identifying synergies and trade-offs, both in HIC and LMICS contexts.[1][2][3] It has been described how health systems have dealt with co-occurrence of the COVID-19 pandemic and climate-related disasters and approaches to developing rapid research responses to catastrophic events. Changes and the way forward on impacts of COVID-19 on population dynamics, particularly on urbanisation, immigration, ageing, and fertility behaviours, have been explored. A health technology perspective on COVID-19 has been discussed and how these solutions will have a lasting impact on global health delivery. Finally, the Lancet-SIGHT Commission on Peaceful Societies through Health and Gender Equality has presented the gendered impact of COVID-19 and response measures in conflict/post-conflict settings, as well as the international community's response to the layered challenges of the pandemic, gender inequality, and armed conflict.

Overview of the plenary session

Aiming to interlink the global megatrends as presented above, this plenary session will discuss a syndemics perspective to COVID-19, possible approaches for "building back better" and the simultaneous challenges we are facing, as well as how we can apply these approaches to the 2030 Agenda.

The pandemic has exposed the weaknesses in the global community's preparedness and resilience. Simultaneous challenges of the pandemic, the co-occurrence of acute and chronic stressors, inequalities, and conflict are emerging, raising questions on how to take multi-level approaches in creating resilient international (health) systems.

It is also evident how health and climate overlap in many areas: Deforestation and impacts on the environment leading to more significant interaction between animals and humans and consequently risking the increase of zoonoses; pollution inevitably leading to health issues; food systems affecting nutrition and the environment both locally and globally.[4] 1 Notably, food consumption is the single largest driver of environmental pressure load accounting for 80% of land conversion and biodiversity loss, contamination of freshwater and coastal ecosystem, 80% of freshwater consumption and contributing 20-30% of global greenhouse emissions.[5] The effects of COVID-19 have led to discussions regarding human dependence on the planet's ecosystems; a need for recognition of the dependence on ecosystem services, the impact of human development from this and acceptance of the responsibility towards future generations. The pandemic also brings vast demographic implications, including increased mortality rates, a disproportionate impact on the mortality of the elderly, as well as risking the future for immeasurable numbers of children.[6]

"COVID-19 is a syndemic."

There is a need for conceptual frameworks to improve the understanding of co-occurring risk factors, improving prevention and intervention programmes. Mendenhall et al. state that the term syndemic provides such a framework, referring to "synergistic health problems that affect the health of a population within the context of persistent social and economic inequalities"[7], considering social, environmental, political and economic factors – understanding that health is largely affected and determined by all of these factors.[8]

The Lancet Commission on the Global Syndemic of Obesity, Undernutrition and Climate Change, argues that the three "pandemics" of obesity, undernutrition and climate change represent the Global Syndemic that affects most people in every

country and region worldwide – a synergy of epidemics, interacting with each other, sharing common societal drivers.1

Richard Horton writes: "COVID-19 is not a pandemic. It is a syndemic. The syndemic nature of the threat we face means that a more nuanced approach is needed if we are to protect the health of our communities", highlighting the prevention of Non Communicable Diseases (NCDs), understanding social inequalities, and virtually all elements playing into the direct and indirect effects of the pandemic.[9] Common systemic drivers need common actions, shedding light on the fact that strategies for rebuilding and policymaking need to take a more holistic approach to combat the COVID-19 virus and its collateral effects.

Given the simultaneous challenges of the COVID-19-era and its syndemic nature - what are then possible approaches for moving forward?

What are possible approaches?

A holistic approach to improving planetary and human wellbeing is provided by Kate Raworth, with her "Doughnut Economics" model, recognising "that wellbeing depends on enabling every person to lead a life of dignity and opportunity while safeguarding the integrity of Earth's life-supporting systems"[10]. Her Doughnut-model combines social and planetary boundaries: The inner limit is a social foundation, below which lie shortfalls in wellbeing, such as hunger, ill-health and illiteracy amongst others, derived from internationally agreed minimum standards for human wellbeing as established in the 2030 Agenda, and the outer boundary represents the planet's ecological ceiling as presented by Rockström et al. [11], thus taking a systematic approach for future sustainability for human and planetary health.

The European Parliament is taking steps towards building a greener future with the recent decision to reduce greenhouse gas emissions with 60% by 2030.[12] In addition, the European Green Deal is aiming to make Europe climate neutral by 2050, boosting the economy through green technology, creating sustainable industry and transport, cutting pollution, and the EU Circular Economy Action Plan focuses on how to foster more sustainable consumption, working towards a climate-neutral economy.[13] [14] These examples are showcasing that large institutions are creating modern strategies to create opportunities for improved planetary and human health, representing designs for multisectoral strategies for human wellbeing, interlinking global megatrends; an exciting way forward in the (post) COVID-19 era.

Multisectoral collaboration is essential for creating a healthy, fair and greener society for future generations. The WHO-UNICEF-Lancet Commission recently published "A future for the world's children?"[15], and prior to this, SIGHT and the Swedish Society of Medicine in 2019 published "Placing Children at the Centre of the SDGs: Road Map on Global Child Health".[16] [17] Both publications discuss the need for prioritising children in policies and development initiatives for transformative change at the centre of the 2030 Agenda. They argue that governments need to move their focus from commercial interests, to securing the rights of the child now, and for the future. Furthermore, such a multisectoral approach needs also to take the gendered impacts of COVID-19 into account. UN Women Secretary-General writes: "This is the time to ensure that gender equality concerns are fully embedded in our short-term responses and longer-term recovery to build the more equal and resilient societies that we will need coming out of this crisis".[18]

The ongoing pandemic thus gives the international community the possibility to find its way back to multilateral collaboration and solidarity; ensuring a strong global governance function. There are salient opportunities for building back better with a Business not As Usual approach[19], maximising co-benefits by addressing interlinkages and common grounds of social and planetary dimensions for future health and planet sustainability, creating multi-level conversations and actions to accelerate progress towards the 2030 Agenda. However – how should we approach these opportunities? How do we approach the synergies and trade-offs that might arise?

[1] Swinburn B. et al. (2019) The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report. Vol 393.

[2] The Lancet Editorial (2017) Syndemics: Health in Context. The Lancet, Vol 389, Issue 10072.

[3] Tsai et al. (2017) Co-occurring epidemics, syndemics , and population health. The Lancet, Vol 389, Issue 10072.

[4] The EAT-Lancet Commission (2019) Food in the Anthropocene: The EAT-Lancet Commission on healthy diets from sustainable food systems. The Lancet, Vol 393, Issue 10170, p. 447-492.

[5]The Food and Land Use Coalition (2019) Growing Better: Ten Critical Transitions to Transform Food and Land Use. The Global Consultation Report of the Food and Land Use Coalition, September 2019: https://www.foodandlandusecoalition.org/global-report/

[6] Johns Hopkins Bloomberg School of Public Health estimates that an additional 6,000 children could die every day only due to restrictions and lockdowns, leading to reductions in essential health service and vaccinations, amongst other indirect effects: Roberton et al.: Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. Lancet Glob Health 2020; 8: e901–08.

[7] Mendenhall et el. (2017) Non-communicable disease syndemics: poverty, depression, and diabetes among low-income populations. The Lancet, Vol. 389, pp. 951-963.

[8] Bukhman et al. (2020) The Lancet NCDI Poverty Commission: bridging a gap in universal health coverage for the poorest billion. The Lancet, Vol. 396, No. 10256

[9] Horton (2020) Offline: COVID-19 is not a pandemic. The Lancet: Vol 396, September 2020.

[10] Raworth (2017) A Doughnut for the Anthropocene: humanity's compass in the 21st century. Comment in: The Lancet, Vol. 1, Issue 2, E48-E49, May 2017.

[11] Rockström et.al. (2009) Planetary boundaries: Exploring the safe operating space for humanity. Ecology and Society 14(2): 32

[12] European Parliament: EU climate law: MEPs want to increase 2030 emissions reduction target to 60%. https://www.europarl.europa.eu/news/en/press-room/20201002IPR88431/eu-climate-law-meps-want-to-increase-2030-emissions-reduction-target-to-60

[13] European Commission: The EU Circular Economy Action Plan: https://ec.europa.eu/environment/circular-economy/index_en.htm

[14] European Commission: Actions being taken by the EU. https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu_en

[15] Clark et al (2020) The WHO-UNICEF-Lancet Commission: "A future for the world's Children?". Lancet 2020; 395: 605–58

[16] SIGHT, Swedish Society of Medicine (2019) "Placing Children at the Centre of the SDGs: Road Map on Global Child Health".

[17]Alfvén et al. (2019) Placing children and adolescents at the centre of the Sustainable Development Goals will deliver for current and future generations, Global Health Action, 12:1.

[18] UN Women: Op-ed: Build back better: women at the centre of decision-making. https://www.unwomen.org/en/news/stories/2020/6/op-ed-ed-phumzile-build-back-better

[19] Kuruvilla et al. (2018) Business not as usual: how multisectoral collaboration can promote transformative change for health and sustainable development BMJ 2018; 363 :k4771

| OBJECTIVES

The objective of the plenary session 4 is to:

- Present how COVID-19 is a syndemic with parallel challenges ongoing such as climate crisis and environment, migration and NCDs.
- Discuss possible approaches to view and act upon the multifaced threats for planetary and human health.
- Identify common grounds and synergies for action for a green, fair and healthy recovery following COVID-19.

| MODERATOR

- **Diarmid Campbell-Lendrum,** Head, Climate Change Unit, World Health Organization, Switzerland

| SPEAKER

- **Zulfiqar A. Bhutta,** Co-chair, The Lancet–SIGHT Commission on Peaceful Societies Through Health and Gender Equality, Founding Director, The Centre of Excellence in Women and Child Health, Aga Khan University, Canada
- **Monika Puri,** Head-Institutional Relations, Roche, Global Ambassador, The G20 Health and Development Partnership, Switzerland
- **Jemilah Mahmood,** Special Advisor, Prime Minister of Malaysia on Public Health, Malaysia
- **Elizabeth Wathuti,** Environmentalist and Climate Activist, Founder of Green Generation Initiative and, the Head of Campaigns at Wangari Maathai Foundation, Kenya
- **Mandeep Dhaliwal,** Director, HIV, Health and Development Group, United Nations Development Programme, United States of America

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WS401

THE FUTURE SOCIETY - POPULATION DYNAMICS FOLLOWING COVID-19

| BACKGROUND

The world population has drastically increased from 5.7 billion in 1994 to an estimated 7.7 billion in 2019. According to the 2017 World Population Prospects,[1] the number is expected to reach 11.2 billion in 2100, with the growth being attributed to declining mortality, high fertility rates in some parts of the world and demographic momentum. The world population is currently subjected to mega-trends with a larger, older, more mobile and concentrated population.

Characterized by a gradual shift in the age distribution towards older ages, an ageing population arises from this decreasing fertility trend and increased life expectancy. A result of declining fertility and increased longevity is the so-called global population ageing. The number of older persons (defined as over the age of 60) is expected to increase by 229% in Africa, followed by Latin America and the Caribbean (161%) and Asia (132%) between 2017 and 2050.[2]

Based on existing, agreed-on global mandates, a collective response requires a life-course approach, as well as a strong primary health care approach for promoting health and preventing disease at all ages, and ensuring the inclusion of health services within Universal Health Coverage (UHC) – including long-term care at home, in communities and when needed, within institutions – without financial burden[3].

COVID-19 has had wide demographic implications, including increased mortality rates, a disproportionate impact on the mortality of older persons, and increased vulnerability of certain migrant groups. The session highlights these groups disadvantaged by the impacts of COVID-19, though highlight the way forwards, suggesting the future of the society.

[1] Department of Economic and Social Affairs Population Division, 2017

[2] United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2019 Revision, Methodology of the United Nations Population Estimates and Projections, Working Paper No. ESA/P/WP.250. New York: United Nations

[3] Sadana R, Soucat A, Beard J. Universal health coverage must include older people. Bull World Health Organ. 2018;96:2–2A. doi:http://dx.doi.org/10.2471/BLT.17.204214

| OBJECTIVES

To explore the possible changes and the way forward on impacts of COVID-19 on population dynamics, particularly on urbanisation, immigration, ageing, and fertility behaviours.

| CHAIRS

- **Rintaro Mori,** Regional Advisor on Population Ageing and Sustainable Development, Asia-Pacific Office, United Nations Population Fund (UNFPA), Thailand

| MODERATOR

- **Stuart Gietel-Basten,** Professor, The Hong Kong University of Science and Technology, China

| PANELIST

- **Eduardo Klien,** Regional Director, Asia Pacific, HelpAge International, Thailand

| SPEAKER

- **Nathalie Roebbel,** Coordinator, Air Pollution and Urban Health, World Health Organization, Switzerland
- **Elizabeth Wilkins,** Doctorante, INED, l'Institut national d'études démographiques, Paris, France
- **Adelina Comas-Herrera,** Assistant Professorial Research Fellow, the Care Policy and Evaluation Centre, London School of Economics, United Kingdom
- **Tolullah Oni,** Clinical Senior Research Associate / Joint Lead of the Global Health Research Group, University of Cambridge MRC Epidemiology Unit, United Kingdom

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WS402

THE LANCET-SIGHT COMMISSION ON PEACEFUL SOCIETIES THROUGH HEALTH AND GENDER EQUALITY - HEALTH AND GENDER AT THE INTERSECTION OF ARMED CONFLICT AND THE COVID-19 PANDEMIC

| BACKGROUND

The Lancet-SIGHT Commission on Peaceful Societies through Health and Gender Equality is dedicated to generating new evidence and practical recommendations on how improved health and gender equality can help contribute to more peaceful societies.

Armed conflict is one of the global community's most pressing challenges, causing significant destruction and major barriers to peace and prosperity. Annual deaths from armed conflict remain at one of the highest levels in the past two decades.[1] Civil wars involving international actors are increasingly prevalent, which is a worrisome trend as these conflicts tend to be more severe, protracted, and difficult to resolve.[2] The consequences of conflict are felt worldwide, not least due to massive forced displacement. According to UNHCR, the UN's Refugee Agency, there were 79.5 million other forcibly displaced people in 2019, largely due to armed conflict. The number of displaced people today is nearly double the 2010 number of 41 million.[3]

On 23 March 2020, the UN Secretary General called for a global ceasefire to facilitate humanitarian action in conflict affected settings, including pandemic response activities. The UN Secretary General expressed deep concern that COVID-19 will make the protection of civilians during armed conflict more challenging than ever, warning that the pandemic is amplifying and exploiting fragilities across the world, including gender inequality.

However, COVID-19 continues to present a number of challenges to peacebuilding, and the dynamics of armed conflict also presents a number of barriers for effect pandemic response.[4] Experts suggest that the responses to COVID-19 in conflict-affected settings must incorporate and address gender inequalities, conflict dynamics, and the larger socio-political context. However, the relationship between gender, health, and conflict, including during the pandemic, are not well understood.

[1] Uppsala Conflict Data Program. 2020. UCPD Conflict Encyclopedia (UCPD database). Department of Peace and Conflict, Uppsala University. https://ucdp.uu.se/exploratory Accessed 10/6/2020

[2] Balch-Lindsay D, Enterline AJ, Joyce KA. Third-party intervention and the civil war process. Journal of Peace Research 2008; 45(3): 345–363. https://doi.org/10.1177/0022343308088815

[3] United Nations High Commissioner for Refugees. Global Trends: Forced Displacement in 2018. 2019; UNHCR, Geneva. https://www.unhcr.org/5ee200e37.pdf

[4] Lancet-SIGHT Commission and WHO EMRO. COVID-19 pandemic: an opportunity and a barrier to health as a bridge for peace in fragile and conflict-affected countries. Policy Brief. Aug 2020. https://sight.nu/wp-content/uploads/2020/08/Policy-Brief-COVID19-pandemic-an-opportunity-and-barrier-to-HBP-140820.pdf

| OBJECTIVES

Hosted by the Lancet-SIGHT Commission on Peaceful Societies through Health and Gender Equality, this webinar will preview the Commission's research on the relationships among health equity, gender equality, and peaceful societies. Speakers will examine the impact of the COVID-19 pandemic in fragile and conflict-affected settings. The Commission argues that interventions to promote gender equality and health equity must be part of the effort to "build back better" after the pandemic. Such interventions must be acutely aware of the patterns of health inequity and gender inequality revealed by COVID-19 and explicitly work to address them. Experts will share their research as well as provide suggestions for how interventions to promote gender equality and health equity could contribute to the "reset" and better address the layered challenges of COVID-19 and armed conflict.

The webinar objectives are to:

- Present the Lancet-SIGHT Commission's conceptual framework on the relationships among gender equality, health equity and peaceful societies
- Discuss the COVID-19 pandemic in the context of conflict-affected settings, with a focus on its impact on health inequities and gender equality
- Examine how the pandemic has deepened gender inequalities, reflected in higher levels of gender-based violence, reduced access to comprehensive sexual and reproductive health services, and a higher burden on health workers
- Examine how the pandemic has impacted on violence against humanitarian aid, including the delivery of health services by humanitarian actors
- Gather feedback on the Lancet-SIGHT Commission's work related to the health and gendered impact of COVID-19 in conflict-affected settings
- Identify how countries and the international community can best respond to the layered challenges of the pandemic and armed conflict, with a focus on health inequities and gender inequalities

| MODERATOR

- **Yoka Brandt,** Permanent Representative, The United Nations, Netherlands

| KEYNOTE SPEAKER

- **Tarja Halonen,** Former President of Finland, Chair of Lancet-SIGHT Commission, Finland

| PANELIST

- **Shuvai Busuman Nyoni,** Executive Director, African Leadership Centre, Kenya
- **Akjemal Magtymova,** Head of Mission and WHO Representative to the Syrian Arab Republic, World Health Organization, Syrian Arab Republic
- **Elhadj As Sy,** Co-Chair, Global Preparedness Monitoring Board, Senegal

| SPEAKER

- **Anju Malhotra,** Principal Visiting Fellow, United Nations University—International Institute of Global Health (UNU-IIGH), United States of America
- **Jason Phillips,** Adjunct Research Professor, Norman Paterson School of International Affairs, Carleton University, Canada
- **Valerie Percival,** Norman Paterson School of International Affairs, Carleton University, Lancet-SIGHT Commissioner, Canada

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WS403

BEYOND BUILDING BACK BETTER - A HEALTHIER AND GREENER WORLD AFTER THE COVID-19

| BACKGROUND

The COVID-19 pandemic is having a major impact on people's health, the economy and societies at large. There is huge uncertainty about the future and the implications for sustainable development. Yet, the current crisis presents a number of policy windows - areas where problems, solutions and politics will align. There are thus opportunities beyond building back better, maximizing the co-benefits of addressing climate change, pollution and biodiversity loss, food systems and improving population health. How do we build back greener and healthier?

The effects of COVID-19 have led to discussions regarding human dependence on the planet's ecosystems; a need for recognition of the dependence on ecosystem services, the impact of human development from this and acceptance of the responsibility towards future generations. The health risks of the pandemic are substantial, but so are the potential beneficial effects on health as a result of a radical climate change mitigation and adaptation. Major near-term co-benefits can arise through several pathways.

One main area is related to air pollution; 7 million premature deaths yearly are caused by combined effects from outdoor and household air pollution, according to WHO. Air pollution not only substantially contributes to the four top non-communicable diseases - stroke, lung cancer, chronic respiratory disease, and heart disease - but is also responsible for 50% of childhood pneumonia deaths. Reduced air pollution through reduced use of fossil fuels can thus provide rapid health benefits.

Another related area of great impact is our present food system, which accounts for a significant part of greenhouse gas emissions and the burden of mortality and morbidity. The COVID-19 pandemic is compromising nutrition globally, and particularly in low-income and middle-income countries. The combined effect of COVID-19 and the mitigation strategies to respond to the pandemic-including social distancing, school closures, trade restrictions, and country lockdowns-are impacting our food systems and has laid bare its fragility: Food systems may produce a health impact by facilitating the diffusion of zoonotic pathogens in human populations, and the use of antibiotics in livestock breeding and aquaculture contributes to antimicrobial resistance that severely threatens human health. Globally, food systems account for between 19-29% of global greenhouse gas emissions, and food waste remains a significant challenge, particularly in high and middle-income countries, with up to a third of food lost across supply chains. How do we change the dietary habits towards more nutritious and healthy food, and how do we provide food for 10 billion people in 2050 without using food systems that undermine the earth's resources and further contribute to climate change, soil and water pollution, biodiversity loss, and food waste? In addition, the Lancet Commission on the global syndemic of obesity, undernutrition, and climate change "argues for understanding 'systemic drivers that need common actions', proposing that tearing down silos in the academy and health policy, strengthening government action and community voices, dismantling corporate power to better designate who eats what and where, and promoting improved, more sustainable business models for a healthier future should be syndemic.". The EAT-Lancet Commission also discusses strategies on the overlaps of food systems and climate change mitigation.

Children and adolescents have greater vulnerability than adults due to several factors, both environmental, physiological, anatomical, cognitive and psychological, related to the phase of development in which they are (Stanberry L.R). Thus, special attention needs to be directed to nutritional needs and sustainable diets of children and adolescents, as well as creating platforms for the younger population for their voices and interests to be acted upon in all areas.

In conclusion, this session will use a multisectoral approach to discuss possibilities on how to build back greener and reap the co-benefits of a fundamental and radical green and healthy recovery. Scientists agree that transforming our food systems is among the most powerful ways to change course and realize the vision of the 2030 Agenda. How do we create multi-level conversations and action to improve equal progress towards Agenda 2030, in the light of COVID-19?

| OBJECTIVES

The aim of this session is to discuss the linkages and syndemics across climate change, environment, food systems and health. Thus, this session will:

•Explore the evidence of, and linkages and syndemics among, various sectors to identify synergies and trade-offs with the SDG perspective according to different contexts;

•Demonstrate positive examples from different country perspectives on resilience, sustainability and transitions in the COVID-19 era; and

•Identify ways of how government, civil society and business can work together

| MODERATOR

- **Diarmid Campbell-Lendrum,** Head, Climate Change Unit, World Health Organization, Switzerland

| KEYNOTE SPEAKER

- **Johan Rockström,** Director, the Potsdam Institute for Climate Impact Research & Professor in Earth System Science,, The University of Potsdam, Sweden

| PANELIST

- **Brama Kone,** Lecturer Researcher, University Peleforo GON COULIBALY of Korhogo &, Associate Researcher, Centre Suisse de Recherches Scientifiques, Côte d'Ivoire
- **Omnia El Omrani,** Liaison Officer for Public Health Issues, International Federation of Medical Students' Association, Egypt

| SPEAKER

- **Agnes Kalibata,** Special Envoy of the United Nations Secretary-General for the 2021 Food Systems Summit, United Nations, Rwanda

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WS404

WILL THE HEALTHCARE TECHNOLOGIES FROM COVID-19 LEAD TO A PERMANENT SHIFT IN HOW GLOBAL HEALTHCARE IS DELIVERED?

| BACKGROUND

COVID-19 is the first pandemic where the rapid deployment of technology solutions became a core component of the race to understand, contain and deliver a potential treatment. Many of these technologies failed, but like past global crises, many will also evolve to play a permanent role in healthcare beyond COVID-19.

In this session, we'll take a high-level look at the technology trends which were developed or matured during the pandemic and how they will likely impact the future of global health over the next decade. The focus will be on four key technologies

1. Vaccines - The global race to produce a COVID-19 vaccine led to innovations at each stage of development. We saw significant advances in mRNA vaccine development, repurposing of AI technology to analyse the complex structure of the virus, huge efficiencies in clinical trial processes, and digital reimagining of the supply chain management. What impact will these technologies have for future vaccine development?

2. Telemedicine - Due to physical distancing and pressures on clinical facilities, telehealth scaled massively during COVID-19 as video consultations became the default for primary and non-urgent care. Government regulations were relaxed and privacy concerns took second priority to clinical need. In low-income countries device and connectivity challenges meant although there wasn't a jump to video there were significant innovations in SMS and telephony services. Will virtual care persist after COVID-19? And can we balance the desire for digital technologies in health against regulation and privacy concerns?

3. Big data and AI - COVID-19 accelerated already rapidly evolving AI technologies and the use of big data. It was an AI algorithm that first recognised an unusual cluster of pneumonia cases in Wuhan before official sources and then went on to successfully predict 10 out of the first 12 cities to be affected. We saw pivoting of machine learning from outside healthcare to aid track and trace, case diagnosis, outbreak monitoring and also to identify potential treatments. What did we learn about the future roles of AI in health from COVID-19?

4. Social media health misinformation - Effective public health messages on social media were a key factor in the success of some countries, such as Vietnam, in controlling the initial outbreak. More commonly, however, governments struggled to control misinformation. For the first time, the major social networks took joint steps to limit the spread of false information and validate trusted sources. What are the key lessons for governments and industry in the use of this technology for public health? And how do we use social media to build trust during the vaccine rollout?

| OBJECTIVES

By attending this webinar you will

- Hear about real-world examples of how technology-assisted and failed during the COVID response
- Understand how these technologies have scaled, evolved, and adapted during the pandemic
- Learn how these solutions will have a lasting impact on global health delivery and how they will continue to evolution
- Have the opportunity to ask technology experts for their opinions on whether these technologies will lead to a permanent shift in how global healthcare is delivered

| MODERATOR

- **Ashley McKimm,** Editor-in-Chief, BMJ Innovations, United Kingdom

| SPEAKER

- **William Moss,** Executive Director, International Vaccine Access Center, Johns Hopkins Bloomberg School of Public Health, United States of America
- **Nahoko Shindo,** Senior Advisor, Global Infectious Hazards Health Emergencies Programme, World Health Organization, Switzerland
- **Amandeep Singh Gill,** Senior Fellow & Project Director of the International Digital Health & AI Research Collaborative (I-DAIR), Graduate Institute for International and Development Studies, Switzerland
- **Kelvin Tsoi,** Associate Professor, School of Public Health and Primary Care, and Big Data Decision Analytics Research Centre, Chinese University of Hong Kong, China

PMAC | PRINCE MAHIDOL AWARD CONFERENCE

WS405

DEALING WITH DISASTERS FAST AND SLOW: HEALTH SYSTEM RESILIENCE FOR COVID-19 AND CLIMATE CHANGE

| BACKGROUND

The COVID-19 crisis has demonstrated that many Health Systems around the world are poorly prepared for the co-occurrence of acute and chronic stressors. What will it take to enhance the resilience of health systems?

One critical step will be to make better use of data and information on environmental drivers of health at a variety of time scales, from the immediate time scales required to manage increasingly severe extreme events, to the decadal time scale required to understand potential changes in diseases and other health threats related to climate change. Health systems need to have situational awareness of multiple co-occuring disasters, including weather-related disasters, while at the same time require improved anticipation of emerging risks and future stressors, like zoonotic disease spillover and food or water insecurity.

In addition to weather and climate data, climate resilient health systems will need to incorporate data on land use and land cover, demographics and migration, agricultural systems and nutrition, etc. Effective use of data on weather, climate and other environmental drivers will require enhanced collaboration between the various related scientific communities to improve mutual understanding of requirements and build capacity in all sectors. Moreover, the development of successful public health resilience will be aided by implementation and evaluative research analyzing the effectiveness of early warning systems and risk reductions measures.

| OBJECTIVES

Participants in this webinar will be able to:

- Describe how health systems have dealt with co-occurrence of COVID -19 pandemic and climate-related disasters
- Identify key steps in operationalizing the WHO framework on Climate Resilient Health Systems
- Describe global efforts to enhance cooperation between health and hydrometeorological services and the provision of meteorological and climate services for health
- Describe approaches to developing rapid research responses to disasters

| MODERATOR

- **John Balbus,** Senior Advisor for Public Health, National Institute of Environmental Health Sciences at National Institutes of Health, United States of America

| PANELIST

- **Aubrey K. Miller,** Senior Medical Advisor, National Institute of Environmental Health Sciences (NIEHS), United States of America
- **Antonia Loyzaga,** Trustee, Manila Observatory, Philippines
- **Sujata Saunik,** Additional Chief Secretary, General Administration Department, Government of Maharashtra, India

| SPEAKER

- **Joy Shumake-Guillemot,** Scientific Officer, WHO/WMO Climate and Health Joint Office, Switzerland
- **Carlos Corvalan,** Adjunct Professor, School of Public Health, University of Sydney, Australia