GLOBAL HEALTH CENTRE | 2022

HOW CAN AN INTERNATIONAL PANDEMIC INSTRUMENT ADDRESS ONE HEALTH?

WORKSHOP REPORT

GENEVA GRADUATE INSTITUTE

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This publication was developed as the outcome of the workshop “How can an international pandemic instrument address One Health?” which took place on 30 June 2022.

Co-convenors of the workshop: European Union, Government of Kenya, Government of Mexico, Global Health Centre at the Geneva Graduate Institute.

This report was drafted by Maéva Chabrier and Adam Strobeyko, Geneva Graduate Institute. The report does not necessarily represent the views of a particular participant.

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ABSTRACT

The workshop “How can an international pandemic instrument address One Health” sought to familiarize members of Geneva-based permanent missions and government officials from capitals with the legal and institutional aspects of “One Health” in the context of negotiations of a future international instrument on pandemic prevention, preparedness, and response (“pandemic instrument”).[1]

The workshop identified legal and scientific challenges for implementation of One Health. The presenters identified a regulatory “blind spot” at the midstream level of prevention: the measures contained in the International Health Regulations 2005 (IHR) focus on detecting and containing the international spread of a communicable disease once it occurs, but do not provide a strategy for deep prevention of zoonotic diseases. Specific measures, involving integrated surveillance, regulatory obligations, science-policy interfaces and coordination mechanisms were proposed to address that regulatory gap. The workshop emphasized the complexity of One Health and the importance of addressing the human-animal-environmental health nexus in an integrated, multi-sectoral manner. The workshop participants agreed on the importance of continuing the discussions concerning the way of addressing One Health in the new pandemic instrument.

1 Special session of the World Health Assembly to consider developing a WHO convention, agreement or other international instrument on pandemic preparedness and response, WHA74(16), 31 May 2021.

THE WORKSHOP

Background

The purpose of the workshop was to familiarize members of permanent missions and government officials with the legal and institutional aspects of One Health in connection with the ongoing discussion over the pandemic instrument. The workshop was attended by 35 in-person participants and 57 participants online. The participants represented 38 Geneva-based permanent missions and 4 international organizations.

The One Health High-Level Expert Panel (OHHLEP) defined One Health as "an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals, and ecosystems".[2] In the One Health approach, "multiple sectors work together to achieve better public health outcomes",[3] recognizing that "animal health, human health, and environmental health are intrinsically intertwined and interdependent".[4]

One Health is linked to topics relevant to the pandemic instrument: addressing the drivers of pathogen spillover from animal to human hosts, as well as anti-microbial resistance (AMR) and pathogen sharing. Given the complexity of One Health, the workshop organizers posed the following question: what are the priority issues that could lend themselves to being addressed through an international legal instrument? To help address this question, the Global Health Centre circulated a draft policy brief entitled "The Deep Prevention of Future Pandemics Through a One Health Approach: What Role for a Pandemic Instrument?"[5] among the workshop attendees.

Introduction

The workshop organizers highlighted the need to strengthen coordination and efficiency of global pandemic preparedness and response while avoiding fragmentation of efforts.

A new pandemic instrument was considered to provide a good opportunity to build upon existing initiatives to integrate several streams of international regulation and cooperation. In that context, the important role of the Quadripartite, composed of the Food and Agriculture Organization (FAO), the World Organisation for Animal Health (WOAH, formerly OIE), the UN Environment Programme (UNEP) and the World Health Organization (WHO), was mentioned.[6]

2 Joint Tripartite (FAO, WOAH, WHO) and UNEP Statement, Tripartite and UNEP support OHHLEP's definition of 'One Health', FAO, WOAH, WHO and UNEP, 2021, at https://wedocs.unep.org/bitstream/handle/20.500.11822/37600/JTFOWU.pdf [last access 19/09/22].

3 WHO, 'One Health', 2017, at https://www.who.int/news-room/questions-and-answers/item/one-health [last access 19/09/22].

4 WOAH, 'One Health', 2022, at https://www.oie.int/en/what-we-do/global-initiatives/one-health/ [last access 19/09/22].

5 Le Moli et al. 'The Deep Prevention of Future Pandemics through a One Health Approach: What Role for a Pandemic Instrument?' Global Health Centre, Geneva Graduate Institute & Cambridge Centre for Environment, Energy and Natural Resource Governance. Available at: https://www.governingpandemics.org/_files/ugd/356854_3f30135c0cc74b25958931d2a0f25e69.pdf

6 Memorandum of Understanding between FAO, WOAH, WHO and UNEP regarding cooperation to combat health risks at the animal-human-ecosystems interface in the context of the "One Health" approach including antimicrobial resistance, 2022.

Outcomes

PRESENTATION: ONE HEALTH FROM A SCIENTIFIC PERSPECTIVE – WHAT IS NECESSARY?

Prof. James Wood, Dean of Cambridge Vet School, Alborada Professor of Equine and Farm Animal Science, University of Cambridge

COVID-19 has shown that the spillover of pathogens of animal origin to human hosts can have catastrophic consequences. An estimated 1-2 million undiscovered viruses are thought to exist in mammal and avian hosts.[7] Of these, up to 827,000 viruses could have the ability to infect humans.[8] The most important reservoirs of pathogens with pandemic potential in wildlife are mammals (in particular bats, rodents, and primates) and birds (in particular water birds) as well as livestock (pigs, camels, and poultry).

To mitigate the risk of zoonotic spillover, multisectoral and multidimensional interventions need to be considered in order to respond to potential threats. Prof. Wood gave the example of rabies: if 60% of dogs were vaccinated, rabies would disappear from dogs and from local wildlife. However, currently, many countries do not have sustained dog vaccination programmes. Another example concerned the AMR resulting from excessive antibiotic use for growth promotion in livestock. The One Health approach would require reducing unnecessary antibiotic use in animals for food production and massive environmental contamination from animal waste products.

Prof. Wood underlined the importance of integrated disease surveillance. The repeated Ebola outbreaks testify to the interrelation between animal, environmental, and human health. Nevertheless, at least half of all spillover events failed to be reported since Ebola was first recognized. To ensure early detection at source, moreover, more investment in primary healthcare is needed.

These examples illustrated the necessity to act and mobilize resources and stakeholders in implementing the One Health Approach. Prof. Wood argued that local communities cannot be left alone in bearing the cost of prevention. He mentioned the need to develop a strategy which would address issues of poverty, climate change, animal trade, biodiversity loss, increased movement of people and animals and the damage caused by extractive industries, while remaining attentive to the needs of local communities.

Having laid out the challenge from a scientific perspective, the workshop turned to what international arrangements had already been established in response.

7 Jones, K., Patel, N., Levy, M. et al. Global trends in emerging infectious diseases. Nature 451, 990–993 (2008). https://doi.org/10.1038/nature06536

8 IPBES (2020) Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services. Available at: https://ipbes.net/sites/default/files/2020-12/IPBES%20Workshop%20on%20Biodiversity%20and%20Pandemics%20Report_0.pdf

PRESENTATION:
ONE HEALTH – THE PERSPECTIVE OF THE QUADRIPARTITE

Dr Amina Benyahia, Scientist, One Health Initiative (OHI), Healthier Population Division Office (HEP/HEA), World Health Organization

Dr. Benyahia presented the work of the Quadripartite in addressing One Health. She started by mentioning the calls to action by the international community with regard to One Health, such as the recent statements by the G7 and G20, as well as the Food Systems Summit on One Health/AMR. The establishment of the Quadripartite and the creation of the One Health High-Level Expert Panel (OHHLEP) constituted major developments in that regard.[9]

The Quadripartite Alliance provides a collaborative framework for the four constituent organizations (WHO, FAO, WOAH, and UNEP). It seeks to ensure coordinated technical and science-based support for One Health and to spearhead multisectoral collaboration. The Quadripartite's work includes identification of high-impact investment opportunities, support of countries through relevant funds and finance mechanisms and catalyzing sustainable investment in One Health action at all levels.

Dr. Benyahia stressed the importance of integrating a One Health approach at every level of pandemic preparedness and response. The Quadripartite has developed the One Health Joint Plan of Action (OH JPA), with six Action Tracks: 1) Enhancing One Health capacities to strengthen health systems, 2) Reducing the risks from emerging and re-emerging zoonotic diseases, 3) Controlling and eliminating endemic zoonotic, neglected tropical and vector-borne diseases, 4) Strengthening the assessment, management and communication of food safety risks, 5) Curbing the silent pandemic of AMR, 6) Integrating the Environment into One Health. The OH JPA seeks to help countries understand the drivers of disease emergence, identify relevant interventions and create an enabling environment where One Health capacities, infrastructure and resources are supported by regulatory frameworks and improved decision-making.

The Quadripartite focuses on coordinating the work of the four organizations and their support at country level. However, it does not develop new international rules. The workshop therefore turned to the potential for new international One Health rules within the context of a pandemic instrument.

PRESENTATION:
ONE HEALTH FROM A LEGAL PERSPECTIVE – WHAT IS MISSING IN INTERNATIONAL LAW?

Jorge Viñuales, Harold Samuel Professor of Law and Environmental Policy, University of Cambridge and Adjunct Professor of International Law, Geneva Graduate Institute

Prof. Viñuales started by highlighting the gaps in IHR concerning the prevention of diseases: the measures contained in the IHR focus on detecting and containing the international spread of a communicable disease, but do not provide a strategy for prevention of zoonotic disease spillovers or outbreaks. Therefore, he highlighted the need to address the nexus between human, animal and environmental health through "midstream deep prevention".

The notion of "midstream deep prevention" was developed in the policy paper shared with workshop participants. It seeks to address the regulatory blind spot between, on the one hand, the downstream approach of the IHR as well as some international trade agreements and, on the other hand, the upstream prevention of zoonotic risk drivers by means of environmental treaties. Midstream "deep prevention" seeks

9 Strengthening WHO preparedness for and response to health emergencies, A75/19, 6 May 2022.

to reduce the risk of zoonotic spillovers by regulating and monitoring activities and places where animals and humans come in close contact.

Table 1. Analytical Framework[10]

Overall goal	**Reduce risk of infectious disease (re)emergence and spread in humans and animals**			
Context	Environmental governance		Public health governance	
Approach	Deep prevention		Containment	
Stage of intervention	Upstream	Midstream	Downstream	
Focus	Preventing drivers	Preventing events	Detecting, reporting and containing events	
Regulatory target	Drivers of (re)emergence, outbreak and spread	(Re)emergence (incl. pathogen spillover)	Human disease outbreak	Human disease spread
Examples	Macro-drivers (climate change-driven vector redistribution, land-use change, wildlife trade, international traffic, population movements, etc.)	Integrating surveillance of human, animal, environmental pathogens Regulating activities (e.g. host species management, wildlife trade, farming and feeding techniques, genetic modification and release, research, wildlife consumption) and places (e.g. water bodies and installations, farms, wet markets, research facilities (e.g. laboratories), etc.)	Detect spillover into humans, share information, contain outbreak. Strengthen capacities to do the above.	
Instruments	International agreements, e.g. on wildlife trade (CITES), climate change (UNFCCC/PA), biological diversity (CBD, Biosafety Protocol), land-use change (CBD,UNCCD), international traffic, population movements, etc	Pandemic Instrument (TBD)	IHR (2005 or 2024), including self-assessment and Joint External Evaluation (JEE) PWH, WTO General Exceptions, SPS, FTAs	

10 Table 1 from policy paper: "The Deep Prevention of Future Pandemics Through a One Health Approach: What Role for a Pandemic Instrument?"

Prof. Viñuales argued that there is currently a lack of legal tools at the midstream level to reduce the risk of zoonotic spillover. The workshop turned to discuss a number of questions relevant to midstream "deep prevention".

DISCUSSION: COMMENTS, QUESTIONS AND ANSWERS

In the Q&A section, participants asked questions with regard to the operationalization of One Health. Workshop participants asked about the funding and the incentives which could be included in a new instrument. A broader question about the desirability of a new treaty and new measures was also posed.

In response to these questions, one speaker mentioned the importance of financial resources and donor support, while acknowledging that these have been insufficient to date. The need to think about socio-economic consequences of preventative measures was also highlighted.

Prof. Viñuales mentioned the need to think about regulatory incentives in an interrelated way which acknowledges the diversity of interests. The Stockholm Convention on Persistent Organic Pollutants (2001) was given as an example of an instrument that balances public health and environmental concerns. Prof Viñuales argued that midstream "deep prevention" can be addressed both through a pandemic instrument and through more flexible guidelines which take the interests of local communities into account.

Wildlife trade was mentioned as one of the possible areas for regulation. While the speakers agreed on the importance of regulating wildlife trade, Prof. Wood also mentioned the scientific evidence pointing to the increasing risk of disease emergence and zoonotic spillover from livestock.

PRESENTATION: ONE HEALTH MEASURES IN A PANDEMIC INSTRUMENT - WHAT ARE THE OPTIONS?

Prof. Gian Luca Burci, Adjunct Professor of International Law. Academic Advisor, Global Health Centre at Geneva Graduate Institute

The second part of the workshop focused on specific options for a pandemic instrument for addressing existing regulatory gaps at the level of midstream "deep prevention".

The first set of measures concerned integrated surveillance. Prof Burci, mentioned the need to break the regulatory silos, establish comparable metrics for integrated assessment and commit to the sharing of data and mapping of zoonotic hotspots. He mentioned the WOAH Performance of veterinary services pathway (PVS), WHO Joint External Evaluations (JEE) and WHO/WOAH Assessment of capacities at human-animal interface as relevant models.

Prof Burci spoke of the need to identify hotspots and to regulate activities and places to reduce the risk of zoonotic spillover while respecting the diversity of national situations. One relevant model is the 2015 Paris Agreement on Climate Change, which combines nationally determined contributions with a multilateral framework for evaluation of progress.

Prof. Burci then mentioned different models of science-policy interface for potential inclusion in the pandemic instrument. Science-policy bodies can be simply tasked with curation and dissemination of scientific data relevant to the policy process. However, they can also be given a mandate to adopt policies besides curating science. Examples of either models include: the Codex Alimentarius Commission, the Quadripartite, OHHLEP, WHO's normative activities, the Intergovernmental Panel on Climate Change and

the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

Prof. Burci then discussed the possibility of creating a One Health coordinating mechanism and a joint focal point at national level, as well as joint international bodies; relevant precedents include Art. 5 WHO FCTC and Art. 4 IHR. The merger of governance among the Basel, Rotterdam and Stockholm conventions (BRS), the Joint UN/ECE-WHO/EURO Secretariat of the Protocol on Water and Health and the FAO/WHO Codex Alimentarius Commission were discussed as possible models.

Prof. Burci then mentioned cross-cutting measures which could be addressed through a pandemic instrument:

- Guiding principles could be used to express the objective and purpose of a legal instrument and to guide its interpretation. Relevant examples in other instruments include Art. 3 IHR, Arts. 3 & 4 WHO FCTC and Art. 5 of the Protocol on Water and Health.

- Obligations to cooperate, transfer technology and support developing countries could be included in the pandemic instrument. Relevant models include the Sendai Framework for Disaster Risk Reduction, technical assistance under the BRS treaties, the obligation to transfer technology under the 1987 Montreal Protocol and the Technology Mechanism established by the conference of the parties of the UN Framework Convention on Climate Change (FCCC).

- Prof. Burci highlighted the need to finance national capacities and global public goods. Relevant examples include the recently established Financial Intermediary Fund for Pandemic Prevention, Preparedness and Response (FIF), UNDP Antimicrobial Resistance Multi-Partner Trust Fund, the Global Environmental Facility as a mechanism to fund treaty-based projects, as well as financial mechanisms under the FCCC and Kyoto Protocol (Green Climate Fund, Least Developed Countries Fund, Adaptation Fund).

- The new rules for compliance monitoring and evaluation could include periodic reporting obligations, peer or expert review, field verification or support from experts, as well as establishment of dedicated compliance bodies. The relevant examples include self-assessment tools under the IHR: JEE, simulations, after-action reviews, and Self-Assessment Annual Reporting Tool (SPAR).

DISCUSSION: COMMENTS, QUESTIONS AND ANSWERS

The workshop participants highlighted integrated surveillance and AMR as particularly relevant topics for discussion under the One Health Approach. The ongoing monkeypox outbreak was considered as a reminder of the importance of bringing the environmental sector into the discussion.

Participants addressed the link between midstream “deep prevention” and the social and economic determinants of health. They mentioned the need to address vector-borne diseases, animal vaccination and food systems. The important role of communities in the design and implementation of the One Health approach was emphasized throughout the workshop, particularly with regard to compliance with regulations.

One of the speakers raised the importance of sharing information, collecting data and creating a dialogue between the different stakeholders to find the best ways of building a system with necessary tools and expertise. The Quadripartite’s AMR Country Self-Assessment Survey was mentioned as one of the relevant tools for capacity building. Commitment to support and participate in capacity building was also seen as one of the topics for potential inclusion in a pandemic instrument.

NEXT STEPS & CONCLUSIONS

In closing, the moderators emphasized the complexity of One Health and the importance of regulation at the human-animal-environmental health nexus. The importance of continuing to discuss One Health in connection with the ongoing negotiations of a pandemic instrument was highlighted.

ANNEX I. WORKSHOP AGENDA

PART ONE

14:00-14:15: Welcome Remarks
Francisca Elizabeth Méndez Escobar, H.E. Ambassador, Permanent Representative of Mexico to the UN Office and other international organizations in Geneva
Suerie Moon, Co-Director, Global Health Centre at Geneva Graduate Institute

14:15-14:30: Presentation: One Health from a Scientific Perspective - what is necessary?
James Wood, Dean of Cambridge Vet School, Alborada Professor of Equine and Farm Animal Science, University of Cambridge

14:30-14:45: Presentation: One Health - the Perspective of the Quadripartite
Amina Benyahia, One Health Initiative (OHI), Healthier Population Division Office (HEP/HEA), World Health Organization

14:45-14:55: Clarification Questions

14:55-15:10: Presentation: One Health from a Legal Perspective - what is missing in international law?
Jorge Viñuales, Harold Samuel Professor of Law and Environmental Policy, University of Cambridge and Adjunct Professor of International Law, Geneva Graduate Institute

15:10-15:45: Q&A and moderated discussion among participants
15:45-16:00: BREAK

PART TWO

16:00-16:15: Presentation: One Health Measures in a Pandemic Instrument - what are the options?
Gian Luca Burci, Adjunct Professor of International Law. Academic Advisor, Global Health Centre at Geneva Graduate Institute

16:15-16:30: Comments
Athman Mwatondo, Head, Zoonotic Disease Unit, Ministry of Health, Kenya
Faye Ioannou, Health and Consumer Protection Directorate (DG SANTE), European Commission

16:30-17:15: Q&A and moderated discussion among participants
17:15-17:30: Conclusions and next steps
17:30-18:30: Reception

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