

Bridging gaps and leveraging opportunities for One Health: Feedback from the 8th World One Health Congress

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Abstract

We attended the 8th WOHC between the 20th and 23rd of September 2024 in Cape Town, South Africa and we provide here our feedback with a specific perspective on the policy implications. The One Health approach still needs to go beyond diseases and to embrace a truly holistic definition of health in both its pathogenic and salutogenic components. This broader definition of health should be applied to all human groups with more equity and inclusivity, to non-human animals, as sentient beings, and to ecosystems and the environment in a more integrated way.

One Health Impact statement

Given our multidisciplinary expertise and varied interests, we hope to have grasped the quintessence of the 8th World One Health congress in Cape Town in September 2024 and may therefore be able to provide a fair impression, albeit necessarily biased and personal. Our reflections below will be guided by the One Health High Level Expert Panel (OHHLEP) foundational principles of the new One Health definition (Mettenleiter *et al.*, 2023).

Since 2011, the World One Health World Congress (WOHC) has provided every 2 years a snapshot of the state of One Health (OH) at the intersection of science and policy (Zinsstag *et al.*, 2023). The 8th WOHC that we attended between the 20th and 23rd of September 2024 at the International Conference Centre of Cape Town in South Africa was no exception to the rule, and we provide here our feedback with a specific perspective on the policy implications. “We” came together to write this opinion piece through our ongoing collaborations and through discussions on the topics presented here during the course of the conference. We are not representative of the OH community: our group of OH scholars has a diversified multidisciplinary expertise, a balanced gender composition, and a non-exclusive but pronounced African bias.

The congress was a success thanks to the coordination and hosting team, supported by the Quadripartite (UNEP *et al.*, 2022) alliance on OH, which took up the challenge to bring together more than 1.400 participants from 87 countries, 400 speakers across 70 sessions, and 600 scientific posters (Available at: <https://>

globalohc.org/8WOHC, accessed 15 November 2024). It was also the first time the event was rooted in Africa, a continent now rich in OH initiatives, platforms and projects crafting a OH approach woven into African contexts (Fasina *et al.*, 2021; Richards *et al.*, 2024). With numerous parallel sessions, we could not cover the integrality of talks and posters presented, we independently selected the talks we attended and may have missed some significant presentations and discussions. However, we hope to have grasped the quintessence of the congress and may therefore be able to provide a fair impression, albeit necessarily biased and personal. Our reflections below will be guided by the One Health High Level Expert Panel (OHHLEP) foundational principles of the new OH definition (Mettenleiter *et al.*, 2023) (Table 1).

Since the 1st WOHC in Melbourne, Australia, in 2011, attended by some of us, the OH concept and approach have gone a long way. The Planetary Health concept has joined EcoHealth and One Health in the dance of concepts (Horton and Lo, 2015; Roger *et al.*, 2016) and, progressively, uncharted corners of the concept(s)

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Submitted: 29 October 2024. Accepted: 16 December 2024. Published: 28 January 2025



have been (and still are) explored. Some of the presentations reflected on the emergence of these new dimensions. Since 2022, with the new definition of OH concept by OHHLEP, the scientific and strategic advisory group to the Quadripartite organizations (Mettenleiter *et al.*, 2023), there seems to be a consensus among the OH proponents for a more holistic definition of the concept that is agreeable to most. The general framework and its graphic representation were not challenged during the congress, and they were even used extensively to illustrate several presentations and posters. The new definition was used to propose sessions related to plant health (FP1, 3 & 4), food systems (FP1), gender and social sciences (FP2 & 3), and marginal communities (FP2 & 5). OH is currently the leading integrated approach to health and its theoretical and methodological relationship with Planetary Health or EcoHealth should be clarified. A session on "Expanding Research and Practice" addressed the philosophy of science and the philosophical consequences of OH based on the new OHHLEP definition which calls for an anthropocentric perspective that moves towards a multi-species ontology. Currently, OH has a disruptive dynamic, reshaping academic and state institutions and policies.

However, despite the new OHHLEP holistic definition, the three pillars (or components) of the OH concept attract unbalanced attention and means, which leads to misunderstandings between fields (FP1 in Table 1). This was highlighted in the new Joint Plan of

Action of the OHHLEP that defines one of its action tracks as the need to better integrate the environmental health component into the OH concept (FAO *et al.*, 2022). At the congress, despite the presence of UNEP which delivered key and significant messages on the need to integrate the environmental dimensions of the OH concept more quickly and more holistically, particularly in the context of multiple crises (e.g., climate change, biodiversity erosion), the way in which environmental health was dealt with in many presentations has remained disease-focused, exclusively considering the environment as a source of threats to human or farmed animal (i.e., livestock) health (FP3). The focus on the environment as a source of risk rarely includes an approach in terms of the political ecology of disease (Dzingirai *et al.*, 2017). This approach would allow to address issues such as social inequalities in risk exposure, and the role of economic infrastructures in generating health risks (e.g., farming intensification, industrial pollution). Attempts to overcome this disease-focus approach have remained anchored in an anthropocentric perspective, framing the environment as a source of ecosystem disservices, and neglecting environmental ethics considerations. One would have expected the scientific community to stand more at the frontier of knowledge proposing a diversity of approaches, opinions and examples of OH operationalization of this sector to feed the OHHLEP recommendation for better integration. For example, the health of wildlife was mainly addressed in the presentations from the perspective of the risk posed by wildlife to

Table 1. Observations at the 8WOHC (third column) based on the One Health High Level Expert Panel (OHHLEP) foundational principles (FP) of the new One Health definition (first column) and their adapted definition (second column).

OHHLEP Foundational principles	Definition*	At the 8WOHC, we observed
FP1. Equity between sectors and disciplines.	Balance between the different components of One Health	<ul style="list-style-type: none"> - Still largely unbalanced towards human and animal health components - The environmental component is mainly seen as a source of threats for the two other components
FP2. Sociopolitical and multicultural parity	Based on the doctrine that all people are equal and deserve equal rights and opportunities. Means inclusion and engagement of communities and marginalized voices.	<ul style="list-style-type: none"> - Need for a more paradigmatic clarity between the different integrated concepts of health - Mental health and well-being were not enough present - Lack of intersectionality thinking - Need to challenge the North-South relationship in OH projects - Representativity of Indigenous People and local communities relied mainly on a few NGOs - Young African OH professionals need capacity building in leadership and communication
FP3. Socio-ecological equilibrium	Seeks an harmonious balance between human-animal-environment interaction and acknowledging the importance of biodiversity, access to sufficient natural space and resources, and the intrinsic value of all living things within the ecosystem.	<ul style="list-style-type: none"> - The environmental component is seen as a driver/source of threats for the two other components - The research community needs to go beyond the disease-centred approach - Anthropocentric approach dominating
FP4. Stewardship and the responsibility of humans	To change behaviour and adopt sustainable solutions that recognize the importance of animal welfare and the integrity of the whole ecosystem, thus securing the well-being of current and future generations	<ul style="list-style-type: none"> - Anthropocentric approach dominating - Well-being of humans and more-than humans were almost not addressed - Lack of intersectionality thinking - Excessive focus on individual behaviour to address human responsibility, to the detriment of research in political science and management science,
FP5. Transdisciplinarity and multisectoral collaboration	Includes all relevant disciplines, both modern and traditional forms of knowledge and a broad representative array of perspectives.	<ul style="list-style-type: none"> - Social sciences and humanities were not given the emphasis they need - Political sciences did not address enough informal collaborations necessary for OH institutionalization - Mental health and well-being did not feature much in the congress - Indigenous knowledge systems are still not well represented in WOHC

*Adapted from Mettenleiter *et al.* (2023).

the health of farmed animals or humans, and more rarely to the health and conservation of wildlife and ecosystems itself (but see (Goulet *et al.*, 2024)). The OHHLEP definition thus invites us to rethink health and the governance of biodiversity management in a new conceptual and methodological framework of Health in Human-Environment Systems (Zinsstag *et al.*, 2024) in which environmental health represents the health of the environment and ecosystems, whose restoration is crucial to reducing the above-mentioned environmental exposure factors. Few contributions related to how the health of humans, animals, plants and the environment should be balanced (Zinsstag *et al.*, 2024) and how to deal with the necessary trade-offs between compartments.

Another aspect of the new OH definition proposed by OHHLEP is that it states that the core competencies to achieve OH are coordination, collaboration, communication and capacity building to tackle the wicked complexity of social-ecological system and the intricated health issues associated. The mobilization of social sciences is often limited to support the implementation of participatory diagnostic or intervention in health. This is a narrow view of what are social sciences, and a way to depoliticize health issues. The role of social sciences should be more central to OH (FP5). However, social sciences are virtually caught in the same problematic situation as environmental health vis-à-vis the OH concept. Participatory sciences are often instrumentalized by medical sciences to consult various stakeholders, often local communities or Indigenous People, extracting information and claiming legitimacy of participation when, often, the concerned processes do not respect the basic rule of participation nor the principles of the methodologies. The reason is commonly that these processes are carried out by non-social scientists or the social scientists themselves but with indecent budget and time to achieve proper results.

The presentations at WOHC showed that social sciences are mobilized when it comes to the design and implementation of OH interventions (mainly for education and raising awareness activities) but are substantially neglected when it comes to designing or implementing research activities and to fostering social systems' cohesion (e.g., Figuié, 2018). Humans are conceived as biological components, or as sources of risks (through individual behaviours). But when it comes to understanding or operationalizing OH, the roles of social organizations, institutions, and policies, are totally disregarded. During the congress, more sessions dedicated to the place of social sciences and humanities could have given the social sciences the place they deserve in the OH concept (FP1 & FP5). Beyond the economic sciences which were well represented, social sciences should be central to the OH concept, maybe even more central than the biomedical sciences which currently dominate the field.

Political sciences were represented during the WOHC mainly to address OH institutionalization at the national level through the creation of new OH structures (e.g., platforms, initiatives), often neglecting analyses of intersectoral or informal collaborations within countries (FP5). These collaborations, though not necessarily labeled "One Health", have yet a crucial impact on how political actors adopt the approach. The role of states and governments, particularly in the Global South, were scarcely addressed, despite a few thoughts on the sustainability of actions and projects undertaken and the desire to empower national capacities. The current debates on North-South inequalities within the pandemic treaty negotiations and on the access to vaccines were not addressed, as were all the political questions that were largely left aside.

Too little was heard also about the second component of human health (as per the WHO definition), namely mental health and well-being (FP2 & FP5). Even in the anthropocentric vision of the OH concept, the final objective, human health, is mainly apprehended under its biomedical component (i.e., targeting an absence of

disease in human populations and individuals). However, mental health and well-being could be considered as the ultimate measurement of human health, as one can be sick but happy and free of disease but feeling miserable. One single presentation during the congress mentioned the concept of the economy of well-being in the OH concept. Therefore, mental health remains an orphan area of the OH concept that requires much more attention and could offer a gateway between human and environmental health through the recent framework of relationships between Nature Contributions to People and mental health (Pienkowski *et al.*, 2024). Similarly, there was no session dedicated to animal welfare during the conference and scarce mention of it.

This congress brought together a diverse audience including donors, policy makers, researchers, development NGOs as well as specialists in epidemiological intelligence and biological weapons, among others. This shows the extent and diversity of the OH community (FP5). The audience of the OH concept should be expanding even more, including civil society organizations, and in particular development NGOs, some of which could find in it the opportunity to advance their agenda on issues of social justice, gender inequalities, the rights of Indigenous Peoples or of more-than-humans (FP2). However, the question of how to have a better representation at such WOHC of Indigenous People and local communities, the beneficiaries of the OH approach, and offering them a space for voicing their own representations of health is still open. Probably observing how the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) created a working group for ILPC could help the OH community think about this aspect. The private sector was not very well represented directly at the congress (but present among the sponsors), although the need to better integrate private actors in the next congresses was underlined.

Due to its location in Africa, it is the first congress that has brought together so many representatives both seasoned and early career scientists and experts from African countries. Observations from congress indicate the need for funding support for the contextualization of the global health agenda in Africa and to strengthen OH research, its institutionalization and operationalization in public and private institutions (government, research and academia). Despite some positive developments during the WOHC, there is still a need to create an environment where African OH professionals can articulate their issues as well as strengthen their capacities in leadership and communication oriented towards the future generation of OH researchers in Africa. Although this conference was hosted in Africa, there was no late breaker contribution from Africa. Finally, there was also an overrepresentation (at least for oral presentations) of representatives from English-speaking countries, highlighting a significant imbalance in not just Africa but also in other LMICs probably due to challenges to secure funding for this expensive conference but also to language-based dysconnectivity between OH regional communities.

The contemporary context is putting pressure on all areas of society, and a concept such as OH cannot escape it. The notion of intersectionality, a concept which refers to the situation of beings who are simultaneously subjected to several forms of stratification, domination or discrimination in a society, was not intensively debated (FP2). A session on "Women for One Health" was organized, early in the morning with participation largely dominated by women. The notion of decolonization (e.g., of practices, of mindsets; in its scientific definition) which can apply in many dimensions of OH including access to good health in both its biomedical and holistic dimensions has been lightly touched upon during the conference. Recent publications have raised these political challenges for OH (Buyum *et al.*, 2020; Van Patter *et al.*, 2023). Intersectionality questions whether dominant OH stakeholders prevent the emergence of other dominated stakeholders in the field, and whether there is a need

for more advocacy towards dominated stakeholders. Of course, the OH concept is a boundary object that belongs to everyone, and everyone must find their own perspective and interest in it. But this also means that it must not be monopolized (politically, financially) by a few dominant stakeholders or sectors. Engaging with non-Western partners requires a multi-epistemic perspective that takes local contexts into account. Future conferences should thus contribute to more paradigmatic clarity between the different integrated concepts of health (FP2).

The request for the decolonization of OH is also becoming pressing. Neocolonial dynamics resurface covertly in many OH projects, where research initiatives predominantly flow from the Global North to the Global South, and when co-construction processes are initiated, they bend under the pressure of compressed project timelines. Failing to challenge how projects are designed, function, how funding flows and the very way research objectives are defined (and by who) represents a significant oversight that could jeopardize the sustainability and adoption of the approach (FP2). The conservation and development sectors have been in turmoil recently on this subject, and the voiceless and other invisibles of OH are coming to the boil. Finally, going beyond human struggles, practitioners and theoreticians of the OH concept should dare to leave the shores of anthropocentrism for those of ecocentrism. The standard-bearers, mainly from the younger generation, for the well-being and rights of more-than-human animals are knocking at the door and the future WOHC should take note, and action, of that (FP4).

In conclusion, this fruitful WOHC provided a snapshot of the OH scientific community's current thinking. The OH approach needs to be brought beyond diseases and adopt a truly holistic definition of health in both its pathogenic and salutogenic components, including its linkages to the biodiversity, pollution and climate change crisis. Ongoing new linkages with other communities such as the IPBES and the Intergovernmental Panel on Climate Change (IPCC) will provide bridges with other scientific communities to help OH to fully embrace the multiple dimensions of its new definition and contribute to the integration of the health element in the polycrisis context. This broader definition of health should be applied to all human groups with more equity and inclusivity, to non-human animals, as sentient beings, and to ecosystems and the environment in a more integrated way. The OH community shall have to reflect in the coming years whether the approach's main target is to secure human health, or whether the intrinsic value of other non-human beings is also worth caring for.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

ETHICS STATEMENT

The authors confirm that the research meets any required ethical guidelines, including adherence to the legal requirements of the study country.

AUTHOR CONTRIBUTIONS

All author contributed equally to the development of this article.

FUNDING STATEMENT

EU – OACPS (Grant/Award Number: 'FED/2021/428-198') Agence Française de Développement (Grant/Award Number: 'PREZODE').

ACKNOWLEDGEMENTS

AC, PM and MF were co-funded by the project Capacitating One Health in Eastern and Southern Africa (COHESA), FED/2021/428-198, co-funded by the OACPS Research and Innovation Programme. MF & MdGW were co-funded by the CTS Santé of Cirad. AC was co-funded by the CTS Biodiversité of Cirad. JM was funded by the PREZODE in action in the global south (PREACTS) project.

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