

COMMENT

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The São Paulo declaration on One Health: Brazil's path forward to face intersectoral health challenges

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Abstract

In 2024, Brazil reached significant milestones in advancing the One Health framework, notably with the establishment of the Interinstitutional Technical Committee for One Health and the launch of the São Paulo Declaration on One Health. These developments mark a crucial step forward in Brazil's strategy to address the interconnected challenges of human, animal, plant, and environmental health. The One Health framework underscores the need for cross-sectoral collaboration, transdisciplinary partnerships, and community-driven engagement, particularly as global issues such as climate change, ecosystem degradation, and health crises become increasingly urgent. The São Paulo Declaration advocates for integrated health surveillance, fostering intersectoral cooperation, and promoting sustainable practices to tackle emerging health threats. It calls for a unified approach to addressing climate change, biodiversity loss, and social vulnerability while prioritizing research, capacity building, and policy integration across all governance levels. This commentary highlights the importance of the São Paulo Declaration in advancing Brazil's One Health strategy and calls for sustained action from academia, governments, and society. These collective efforts are critical to ensuring a resilient and sustainable future, safeguarding the health of humans, animals, and the environment through holistic collaboration.

Keywords One Health, Network, Brazil, Tropical medicine, Workshop

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Background

One Health is an integrated approach that recognizes the intrinsic interconnection between the health of humans, domestic and wild animals, plants, and the broader environment, including ecosystems. Therefore, the One Health framework underscores the critical need to enhance cross-sectoral collaboration, foster transdisciplinary partnerships, and prioritize community-driven engagement to promote health security in the face of global transformation. The current state of ecosystem degradation, climate change, and related health crises reveals the vulnerability of health structures and the urgent need for an integrated and holistic approach to safeguarding human, animal, and environmental health. Strengthening health systems' capacities and intersectoral actions are imperative, requiring policies that integrate the One Health perspective across governance levels, while respecting community-specific cultural, economic, and social contexts [1–3].

The emergence of zoonotic diseases highlights the risks associated with ecosystem degradation and intensified human activities, which directly connect to both One Health and Planetary Health. In this context, One Health emphasizes the interconnectedness of human, animal, and environmental health. Planetary health expands this perspective by considering the broader, systemic impacts of environmental degradation on global health systems [4]. Together, they underlie the need for integrated strategies that address these interdependencies, ensuring a more sustainable and resilient future.

The One Health initiatives have been implemented in Latin America for several decades, especially in rural and underserved urban areas marked by low socioeconomic status and limited medical resources. Health professionals have fostered collaboration with local communities, including Indigenous populations, through grassroots movements. These “bottom-up” approaches have effectively enhanced disease prevention and control, illustrating a practical application of One Health principles and actions even before their formal recognition in the region [5].

Brazil is one of the world's most biodiverse countries in Latin America, with complex social, political and economic dynamics, and has witnessed increasing environmental degradation in recent years such as wildfires, intense heat waves, severe droughts, and extensive floods [5]. We call on Brazilian policymakers to define and implement a clear and sustainable course of action. In harmony with global initiatives, we highlight the essential connection between domestic and international efforts in addressing climate change and preserving both biodiversity and socio-biodiversity.

It should be noted that the Pan American Foot-and-Mouth Disease Center (PANAFTOSA) of the Pan

American Health Organization (PAHO) was established in Latin America in 1951, as a regional public health initiative. Although PANAFTOSA/PAHO initially focused on eradicating foot-and-mouth disease (FMD), its scope later expanded to include other zoonoses, food safety, and transboundary animal diseases. It became a pioneer in implementing programs to manage health risks under the “One Health” concept, addressing the interconnectedness of human, animal, and environmental health [6].

Despite moderate technical capacity, Brazil remains vulnerable to infectious disease threats due to fragmented health governance and limited cross-sectoral integration. According to the Global Health Security Index (GHS Index), Brazil ranks 43rd out of 195 countries, with an overall score of 51.2, slightly above the global average yet insufficient to ensure effective preparedness [7]. The country performs relatively well in areas such as early detection, but shows considerable weaknesses in health system response, deployment of medical countermeasures, and risk communication. These gaps hinder Brazil's ability to translate surveillance capacity into coordinated action during public health emergencies. When cross-referenced with the One Health Index (OHI) applied to South American countries [8], a deeper structural issue emerges. Brazil scored 7.3 out of 12 in the OHI, one of the better scores in the region, reflecting relative strength in human and animal health services. However, the study reveals persistent disconnects among sectors, especially in integrating environmental health into surveillance and response systems. This fragmentation weakens the country's ability to anticipate and manage zoonotic spillovers, vector-borne diseases, and environmentally driven outbreaks, which are recurrent risks in Brazil's epidemiological landscape. Moreover, Brazil's historically high burden of diseases such as dengue, Zika, chikungunya, tuberculosis, and COVID-19 underscores the need for systemic resilience rather than reactive containment. The coexistence of strong surveillance with poor intersectoral coordination illustrates a pattern of “surveillance without resilience.” Without institutionalizing the One Health framework through integrated data sharing, coordinated preparedness efforts, and multidisciplinary capacity Building, Brazil risks maintaining a fragmented health infrastructure that is insufficiently prepared to address complex, multifactorial public health threats. Therefore, it is evident that Brazil's ongoing vulnerabilities to infectious diseases and health system challenges underlie the urgent need to adopt a One Health approach.

The São Paulo declaration on One Health

The São Paulo Declaration on One Health emerges as an academic, governmental, professional, and social call to collective action, highlighting the importance of adopting the One Health approach in the face of climate change,

biodiversity loss, social vulnerability, and their negative consequences, in alignment with The São Paulo Declaration on Planetary Health [4].

Health surveillance should adopt an integrated approach, incorporating environmental and animal health issues into emergency response protocols. Establishing robust monitoring systems and promoting intersectoral cooperation is fundamental to ensuring a coordinated and effective response to outbreaks and health crises. Furthermore, research should prioritize the connections between zoonoses, environmental health, climate change, population movements, and demographic shifts. Rethinking the global food system by promoting sustainable agricultural practices is essential to reduce risks to health and biodiversity, ensuring a more resilient and equitable future. Academic training must also include the interconnection between health and the environment, preparing professionals to address complex and emerging challenges.

Significant efforts need to be undertaken to tackle the social-ecological factors influencing health emergencies, such as outbreaks of emerging, re-emerging, and endemic infectious diseases. These factors include climate change, biodiversity loss, and land-use changes, which necessitate the implementation of effective and enforceable legislation, incorporation of new technologies, as well as investment, capacity building, new governance paradigms, cooperation, and collaboration with various sectors and professionals beyond the health field [9].

On August 8th, 2024, the Federal Government of Brazil inaugurated the Interinstitutional Technical Committee for One Health, established by Decree No. 12,007 on April 25, 2024. This committee aims to foster an intersectoral and multidisciplinary approach that acknowledges the interconnection between human, animal, plant, and environmental health. The Committee represents a critical advancement in institutionalizing the integrated One Health approach for intersectoral governance in Brazil. Coordinated by the Brazilian Ministry of Health, the committee comprises 20 entities, including Ministries, institutes, regulatory agencies, and professional councils with representatives from several fields. This Committee functions through a governance model organized into thematic subgroups. Its primary funding derives from public resources from the different entities, complemented by technical support. The One Health Working Group within the Ministry of Health, under the Coordination for Surveillance of Zoonoses and Vector-borne Diseases, played a foundational role in fostering interministerial dialogue and shaping the current institutional architecture. The principal objective is to develop the National One Health Action Plan in line with Quadripartite OHJPA. Moreover, the committee seeks to coordinate with states and municipalities to guide interfederal

and intersectoral measures and support the development of studies and research incorporating this approach [10].

One Health High-Level Expert Panel contributed to the One Health Joint Plan of Action (JPA), a strategic framework by the Quadripartite for implementing the One Health approach to tackle global issues at the human-animal-ecosystem interface, aligning with the United Nations Sustainable Development Goals [11]. Furthermore, we also considered the Theory of Change (ToC) alongside its One Health definition and actions [12].

International efforts have been made to integrate biodiversity and health in policy and practice of One Health, and it is important to mention governance instruments that are essential for shaping future strategies. The Global Biodiversity Framework adopted under the Convention on Biological Diversity (CBD) in 2022, adopted by 196 countries, outlines ambitious targets for halting biodiversity loss and promoting sustainable and equitable use of natural resources with significant implications for public and environmental health systems [13]. In addition, the 2024 CBD Global Action Plan on Biodiversity and Health provides a strategic framework for integrating health considerations into biodiversity planning and vice versa, emphasizing a One Health approach [14]. Furthermore, the ongoing work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) through its Biodiversity and Health Nexus Assessment offers a critical scientific basis for understanding the interlinkages between biodiversity, ecosystem integrity, and human well-being [15]. These tenets highlight the need for integrated, multisectoral governance and evidence-based policy reforms, elements that are particularly relevant to the aims of the Declaration and to advancing One Health governance in Brazil and across the Americas.

The document “A health perspective on the role of the environment in One Health” published by World Health Organization (2022) builds on this by emphasizing the crucial role the environment plays in human health, particularly through its influence on disease transmission and its impact on both animal and human well-being. It also draws attention to the additional pressures of anthropogenic stressors, such as pollution and climate change. Together, these works argue for more investment in the integration of the environmental sector within the One Health framework. By giving the environment equal focus alongside human and animal health, it would be possible to improve health outcomes, enhance sector coordination, and better address the root causes of health risks linked to environmental changes [16].

These initiatives were adapted to the Brazilian scenario to advance interdisciplinary dialogue and prioritize proposals. Seven webinars were conducted and led by a diverse group of experts from academia, government,

and different social and professional organizations. These efforts aimed to prepare a document for discussion at a workshop during the 59th Congress of the Brazilian Society of Tropical Medicine, centered on the theme “Challenges for the Implementation of One Health in a Climate Change Scenario”. The discussion explored Brazil’s current health landscape, highlighting key successes and experiences in managing infectious diseases. It also examined the challenges and opportunities involved in implementing integrated health approaches across the country. The influence of climate change on health outcomes was also considered, emphasizing how it shapes disease patterns and increases demands on the health system. The G20 Rio de Janeiro Leaders’ Declaration marked a turning point by catalyzing the development of a One Health plan of action at both national and global levels [17].

The international One Health Initiatives, along with the various initiatives in Brazil outlined above, primarily led to the organization of seven thematic webinars as a preliminary step towards the realization of a national workshop titled “*Challenges in Implementing One Health in a Climate Change Scenario*”, held during the 59th Congress of the Brazilian Society of Tropical Medicine in 2024. Drawing from these insights, a set of recommendations was developed to enhance Brazil’s ability to respond effectively to emerging health threats in a changing environmental context. These themes were addressed through a series of webinars that structured the national dialogue around critical dimensions of the One Health approach, such as: 1. “Strengthening One Health Capacities to Fortify Health Systems”; 2. “Reducing the Risks of Emerging and Re-emerging Zoonoses, Epidemics, and Pandemics”; 3. “Controlling and Eliminating Endemic Zoonotic and Neglected Tropical Diseases and Vector-Borne Diseases”; 4. “Strengthening the assessment, management and communication of food safety risks”; 5. “Addressing Antimicrobial Resistance in the Context of One Health”; 6. “Environment, Ecosystems, and One Health” and 7. “Social Control from a One Health Perspective”. The proposals were organized into a document and discussed in the workshop in groups for approval and prioritization.

The São Paulo Declaration on One Health calls on academia, governments, research institutions, and society to join efforts for a healthy and sustainable future. The São Paulo Declaration on One Health is available in Portuguese (*Additional File1*) and English (*Additional File2*).

Conclusions

The São Paulo Declaration on One Health marks a transformative milestone in advancing the One Health approach in Brazil. It emphasizes the need for

collective action across sectors to strengthen health systems, foster intersectoral collaboration, and promote sustainable practices. By incorporating One Health principles into policymaking and research, Brazil positions itself to address complex challenges such as climate change, zoonotic diseases, and environmental degradation. The establishment of the Inter-institutional Technical Committee for One Health is a significant milestone toward coordinated action and the development of a National One Health Action Plan. The declaration calls for further research, capacity building, and the integration of One Health at all levels to build a resilient, sustainable future.

Supplementary Information

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Supplementary Material 1

Supplementary Material 2

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Author contributions

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Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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