



One Health: From Promise to Practice-Integrating Evidence, Equity, and Enduring Systems

Satesh Bidaisee

School of Medicine, St. George's University, West Indies.

sbidaisee@sgu.edu

EDITORIAL

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ABSTRACT

Background: One Health has swiftly moved from being a slogan to a pressing necessity. Over recent years, the converging threats of zoonoses, antimicrobial resistance (AMR), climate change, and environmental degradation have reinforced that the health of humans, animals, and ecosystems is deeply intertwined.

Purpose: As someone whose career has spanned veterinary medicine, public health, and community research, I believe that this concept is at a critical turning point: either we translate it into sustained action, or it will risk becoming just an academic framework.

Methods: Drawing on my own work and that of many others in the field, this editorial argues for four interlinked priorities: clear metrics, inclusive education and community engagement, ethical and equitable governance, and institutionalized, resilient systems for One Health practice.

Results: One Health has swiftly moved from being a slogan to a pressing necessity. Over recent years, the converging threats of zoonoses, antimicrobial resistance (AMR), climate change, and environmental degradation have reinforced that the health of humans, animals, and ecosystems is deeply intertwined.

Conclusion: As someone whose career has spanned veterinary medicine, public health, and community research, I believe that this concept is at a critical turning point: either we translate it into sustained action, or it will risk becoming just an academic framework.

One Health has swiftly moved from being a slogan to a pressing necessity. Over recent years, the converging threats of zoonoses, antimicrobial resistance (AMR), climate change, and environmental degradation have reinforced that the health of humans, animals, and ecosystems is deeply intertwined. As someone whose career has spanned veterinary medicine, public health, and community research, I believe that this concept is at a critical turning point: either we translate it into sustained action, or it will risk becoming just an academic framework. Drawing on my own work and that of many others in the field, this editorial argues for four interlinked priorities: clear metrics, inclusive education and community engagement, ethical and equitable governance, and institutionalized, resilient systems for One Health practice.

- Articulating Clear Metrics and Demonstrable Outcomes:** We know from work such as *"Zoonoses and One Health: A Review of the Literature"* that although many publications refer to One Health, fewer provide empirical evidence of its outcomes or track its progress (Bidaisee & Macpherson, 2014). For One Health to be more than aspirational, we need measurable indicators:

reductions in zoonotic spillovers, proportions of veterinary or ecological surveillance integrated with human health systems, antibiotic usage rates across human and animal sectors, environmental contamination metrics, etc. For example, recently, practical interventions were explored in zoonoses control in a One Health framework and assessed for their strengths and limitations (Lawal, Bidaisee, & Ducey, 2018). In another finding, a specific zoonotic pathogen and its animal reservoir, with human public health implications, highlighting gaps in surveillance and response, were investigated (Bidaisee & Armstrong, 2017). Metrics matter not only for academic validation but also for guiding policy, budgeting, and on-the-ground action.

- Education, Community Engagement, and Behavioral Dimensions:** A recurring finding in my work and in many others is that knowledge, attitudes, and behaviors are foundational to One Health successes. It was found that many zoonoses are poorly understood by both communities and professionals, which limits response and prevention strategies (Bidaisee & Macpherson,

2014). Effective One Health must include training across sectors (veterinary, environmental sciences, human health) and community engagement to change behavior, culture, and practices. Community-based research and participatory approaches are essential. In Grenada, for instance, canine leptospirosis is widespread, but mitigation efforts require pet owners, public health workers, and local authorities to cooperate. Without trust, local knowledge integration, and behavior change, purely technical interventions will falter.

- **Ethics, Equity, and Shared Decision-Making:** One Health is inherently about connection, but not all connections are equal. Many of the most severe health threats (zoonotic spillovers, AMR, environmental degradation) disproportionately impact low- and middle-income countries, marginalized populations, and those with limited voice in global policy. Yet much of the literature, funding, and policy thinking originates from high-resource settings. My academic biography includes work in collaborations across the Caribbean and through multiple international partnerships, and it has been repeatedly observed how local priorities may differ from externally set agendas. Institutionalizing equity means including local stakeholders in setting research and intervention priorities; ensuring that benefits (surveillance, vaccine access, capacity building) are equitably shared; and that local capacity is strengthened rather than bypassed.

- **Institutionalization, Resilience, and Governance Beyond Crises:** Too often, One Health mobilization spikes during an outbreak, then recedes. The COVID-19 pandemic is the most dramatic example in recent memory of this cycle. While emergency response is critical, sustainable health requires systems capable of continuous surveillance, early warning, cross-sector communication, and flexible governance. Drawing on lessons from *“One Health Effectiveness in Managing Zoonoses”* (Lawal et al., 2018), resilience is possible only when policies are embedded in national public health, veterinary, and environmental agencies; when funding is stable; when workforce development is continuous; and when legal frameworks support cross-sector information sharing.

A Call to Action: Four immediate steps proposed to make One Health practice more robust and impactful should:

- Define and adopt standardized One Health metrics.
- Invest in transdisciplinary education and community outreach.
- Ensure ethical, equitable involvement of all stakeholders.
- Institutionalize One Health structures for continuity.

One Health is neither a transient idea nor only a research domain; it is the framework needed for sustainable, equitable global health. My own publications underscore both progress made and gaps remaining. If we do not act to measure, educate, share power, and institutionalize, One Health may revert to rhetoric rather than realizing its potential. The health of humans, animals, and ecosystems is not just interconnected, it is indivisible. It is up to us as researchers, policymakers, practitioners, and citizens to act accordingly.

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