

Editorial

Operationalizing One Health Through Primary Healthcare

Abdullah Al Mamun

Editor-in-Chief, Health Dynamics

Article history

Received: 1 July 2026

Revised: 11 July 2026

Accepted: 11 July 2026

Published Online: 13 July 2026

***Correspondence:**

Abdullah Al Mamun

Address: Health Dynamics.

Email: aamfst@gmail.com**How to cite this article:** Mamun AA.Operationalizing One Health Through
Primary Healthcare. *Health Dynamics*, 2026,
3(7), 265-266.<https://doi.org/10.33846/hd30701>

Copyrights: © 2026 by the author. This is an open access article under the terms and conditions of the Creative Commons Attribution – NoDerivatives 4.0 International (CC BY-ND 4.0) license (<https://creativecommons.org/licenses/by-nd/4.0/>).

The increasing frequency of zoonotic outbreaks, antimicrobial resistance, food safety concerns, and climate-sensitive health threats underscores the need for a more integrated approach to health. The One Health concept recognizes that the health of humans, animals, and the environment is interconnected, and that these interdependencies must be addressed through coordinated, multisectoral action. While One Health has gained substantial attention in global policy discourse, its practical implementation remains limited in many primary healthcare systems, particularly in low-resource and fragile settings. Primary healthcare provides a strategic platform for translating One Health principles into routine service delivery. As the first point of contact for most individuals and communities, primary care is uniquely positioned to detect early signs of zoonotic disease, promote preventive health practices, and coordinate responses across human, animal, and environmental health sectors. Integrating One Health into primary healthcare can enhance disease prevention, strengthen surveillance, and improve health equity by reaching populations that are often underserved by fragmented health systems. Recent evidence highlights the importance of community-level implementation. Mohanty et al. (2025) identified key community needs for effective One Health implementation, including local zoonotic risk assessment, accessible veterinary services, environmental monitoring, integrated syndromic surveillance, and workforce capacity building.⁽¹⁾ The study also emphasized persistent barriers such as sectoral silos, weak communication systems, short-term funding, limited community engagement, and insufficient multidisciplinary training. These findings suggest that successful One Health implementation requires not only policy commitment but also practical mechanisms for collaboration and community participation.

The global framework developed by the Quadripartite organizations—WHO, FAO, WOA, and UNEP—emphasizes that community-level action is essential for pandemic preparedness and health security.^(2,3) Local contexts shape patterns of risk; for example, rural agricultural communities may be more vulnerable to zoonotic transmission through livestock contact, whereas urban settings may face greater challenges related to environmental pollution and overcrowding. Therefore, One Health interventions must be tailored to the specific socio-ecological conditions of each community rather than relying on uniform approaches. Li et al. (2025) further emphasized that emerging and re-emerging infectious diseases arise from complex interactions within socio-ecological systems.⁽⁴⁾ Their review identified recognition of local heterogeneities and strengthening surveillance-response systems as key principles for preventing and controlling emerging infectious diseases.

Cross-sectoral collaboration and systems thinking were highlighted as essential for addressing the interconnected drivers of disease emergence and for promoting health equity through context-specific strategies.

The integration of One Health into primary healthcare has already shown promising results in several settings. Mahajan et al. (2024) described successful initiatives such as mobile phone-based surveillance for zoonotic diseases in Kenya, integrated vaccination campaigns in Chad, and coordinated efforts to address antimicrobial resistance in multiple countries.⁽⁵⁾ These examples demonstrate that primary healthcare providers can play a central role in identifying and responding to complex health threats when supported by appropriate training, technology, and intersectoral partnerships. Fragile and conflict-affected settings present additional challenges but also illustrate the urgent need for integrated approaches. Mohammad et al. (2026) described how fragmented health services, weak surveillance systems, and environmental pressures in Somalia create conditions in which zoonotic and climate-sensitive threats can rapidly escalate.⁽⁶⁾ In such contexts, embedding One Health within primary care can strengthen epidemic prevention, extend services to underserved populations, and build community trust through coordinated, locally adapted interventions.

Operationalizing One Health through primary healthcare requires several priorities. Including: 1) multisectoral coordination mechanisms should be established at local and district levels to facilitate information sharing and joint decision-making; 2) lightweight integrated data systems can support timely detection of health threats across human, animal, and environmental domains; 3) workforce development should include competencies in risk communication, surveillance, environmental assessment, basic animal health, coordination, and cultural competence; 4) sustainable financing and participatory co-design processes are needed to ensure that interventions remain responsive to community priorities and are supported over the long term.⁽⁷⁾ The implementation of One Health

in primary healthcare is not merely an additional programmatic responsibility; it is a necessary evolution of health systems in response to interconnected global threats. The future of One Health will depend on the ability of health systems to move beyond conceptual endorsement and translate integrated principles into practical, community-centered action.

Competing Interests

The authors declare no conflict of interest.

REFERENCES

1. Mohanty N. A Strategic Action Model for Understanding, Designing, and Achieving Community-level One Health Implementation. *Medical Research Archives*. 2025;13(10). <http://dx.doi.org/10.18103/mra.v13i10.7040>
2. WHO, FAO, WOA, UNEP. One Health Joint Plan of Action (2022-2026). WHO; 2022. Available from: <https://www.who.int/publications/i/item/9789240059139> (Accessed on 24 Jun 2026)
3. World Health Organization (WHO). One Health. Available from: <https://www.who.int/newsroom/factsheets/detail/one-health> (Accessed on 24 Jun 2026)
4. Li T, Zhou X-N, Tanner M. One Health: enabler of effective prevention, control and elimination of emerging and re-emerging infectious diseases. *Infectious Diseases of Poverty*. 2025;14(1): 77. <http://dx.doi.org/10.1186/s40249-025-01337-1>
5. Mahajan S, Krishnan NN, Lahariya AU, Khan Z, Giri PP, Linda AI, Kukreti A, Tondak N. Operationalising 'One Health' through Primary Healthcare Approach. *Preventive Medicine: Research & Reviews*. 2024;1(4):199–206. https://doi.org/10.4103/PMRR.PMRR_8_24
6. Mohamed H, Woods J, Jama-Alol K, Elmi OS, Abdirahman Elmi HS, Mohamed AJ, Adam MH, Abdulahi M, Guitian J, Osman AY, Allen LN. Embedding One Health into primary care in Somalia. *The Lancet Primary Care*. 2026;6(6):100178. <http://dx.doi.org/10.1016/j.lanprc.2026.100178>
7. Samhouri D, Mahrous H, Saidouni A, El Kholy A, Ghazy RM, Sadek M, Kodama C, Tayler E, Holm M, Al Eryani SM, Al Zein EI, Al-Qahtani FS, Malkawi M. Review on progress, challenges, and recommendations for implementing the One Health approach in the Eastern Mediterranean Region. *One Health*. 2025;20:101057. <http://dx.doi.org/10.1016/j.onehlt.2025.101057>