

The New One Health Concept: A Transdisciplinary Approach from a Sectorial to an Integrated Health System

Zakaria Keita^{1,2}, Amadou Koné^{1,2}, Mouctar Tounkara², Laurent Dacheux³, Hervé Bourhy³, Seydou Doumbia^{1,2}, Jakob Zinsstag^{4,5}

⁽¹⁾ University Clinical Research Center of Point G Bamako, Mali.

⁽²⁾ University of Sciences, Technics and Technologies of Bamako. Department of Education and Research in Public Health and Specialties, Bamako, Mali. BP 1204 Bamako, Mali

⁽³⁾ Institut Pasteur, Université Paris Cité, Unit Lyssavirus Epidemiology and Neuropathology, WHO Collaborating Centre for Reference and Research on Rabies, Paris, France

⁽⁴⁾ Swiss Tropical and Public Health Institute, Department of Epidemiology and Public Health, Basel, Switzerland

⁽⁵⁾ University of Basel, Basel, Switzerland

1. Introduction

In this globalized world facing climate change with it increasing natural disasters, emerging, and re-emerging diseases, and rarity of resources, we should change our thinking of health and act/advocate for more integrated health while protecting animals and the environment (One Health approach). In this process, support from innovative technologies such as the blockchain, for the decentralization of the health system and healthcare management, play key roles. An important focus on this movement of new health concepts (New One health-NEOH, planetary health, and eco-health) drives technical and adaptive problems to be solved by multisectoral collaboration. There is an urgent need to see the health of an integrated health system.

2. Aim

The aim is to describe the need for an integrated health system in a transdisciplinary process using innovative technologies to reduce both communicable and non-communicable diseases.

3. Methods

We describe a concept from a sectorial to an integrated health system (Figure 1). The high political authorities take the initiative to mobilize a transdisciplinary team, which coordinates, communicates, and collaborates with ministries, civil society, and other projects/industries to define and implement integrated health politics and systems according to the NEOH approach contributing to the sustainable development goals. To catalyze this, we use innovative technologies to help manage and communicate in a secure and trusted environment. There is not only one method to build this ecosystem, but it needs leadership and contextualization.

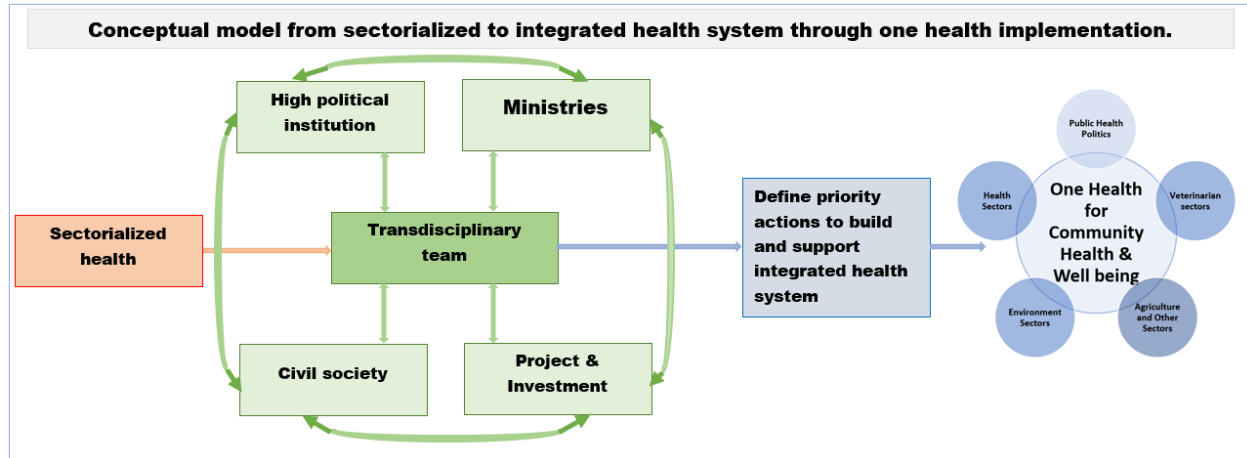


Figure 1: Conceptual model of integrated health system through new one health approach.

4. Results

The expected results are:

- A sustainable integrated health system protects animals, biodiversity, and the environment and reduces costs.
- Positive impact on the entire ecosystem of global health.
- Help in pandemic preparedness, prevention, and control.
- Reduce the global burden of diseases and strengthen sustainable global health.

5. Conclusion

Climate change and new emerging and re-emerging diseases force us to change our concept of health and use innovative technologies in a transdisciplinary process for an integrated health system to build resilient global health. It is an opportunity for humanity to create sustainable integrated health for future generations.

Keywords: Disease burden; Health promotion; Health system; Eco-health; Emerging diseases; Digitalization; Community participation.

Acknowledgement

We acknowledge EDCTP for funding this research in Côte d'Ivoire and Mali, sub-Saharan countries affected by rabies burden and USTTB for the availability of its academic resources.

Zakaria KEITA, University Clinical Research Centre of point G, Bamako (Mali)

E-mail: zakariakeita10@gmail.com; Zakaria.keita@usttb.edu.ml