



Co-creating One Health Workforce through Health System Strengthening in Western India (OHSSIN)

Project Report

Report by Indian Institute of Public Health Gandhinagar, India & Section Global Health, Institute for Hygiene & Public Health, Germany, on 18-01-2024, E-Mail: yasobant@iiphg.org

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LMIC Partner: Center for One Health Education, Research & Development (COHERD), Indian Institute of Public Health Gandhinagar (IIPHG), Gujarat, India

Countries: India & Germany

1. Background of the project

Over the last two to three decades, there has been a constant rise in the surge of emerging and re-emerging infectious diseases, including pandemics, most of which have animal origins and pose a tremendous public health concern. This continuous surge has made health system strengthening (HSS) an even more important task. However, the lack of convergence between the (health) workforce of the human, animal, and environmental sectors was highlighted in one of our earlier studies, "Research to explore Intersectoral Collaborations for One Health Approach" (RICOHA). Due to the workforce's low awareness level and differences in responsiveness within the health system One Health collaborations are not institutionalized. Thus, One Health System Strengthening in India (OHSSIN) was initiated to strengthen the local health systems through capacity building of the (potential) One Health workforce; the project exemplarily targeted three Western Indian states, Gujarat, Rajasthan, and Maharashtra, by examining, defining and increasing the required knowledge of the One Health workforce.

2. Project Summary

The two main objectives of the project were (1.) to investigate, document, and prioritize the threats and risks for emerging diseases at the human-animal interface in Western India and (2.) to increase the capacity of the existing clinical and community health workforce for early detection of threats and risks for emerging diseases. The following two work packages (WP) were implemented to achieve the above-mentioned objectives:

1. Co-creation research workshops for prioritization of emerging threats and risks

The main aim of conducting state-level co-creation workshops was to prioritize risks and epidemic-prone and emerging diseases considering the local context. The following activities were involved for the co-creation workshops: review of the existing tools for prioritization, tool development, identification of the stakeholders, and lastly, planning and conducting the workshops.

2. Implementation of strengthening and capacity building for the healthcare workforce

The main aim of capacity building was to enhance the knowledge of clinical and community-level workers from different departments on the early detection of emerging threats and risks. The following activities were conducted: review of existing training material, training content development, identification of existing workforce and planning and conducting training sessions.

3. Findings

The following are the major achievements of the project:

1. One Health Risk and Disease (OHRAD) prioritization tool developed
2. 03 state-level co-creation One Health Workshop conducted
3. Top 10 risk factors and epidemic-prone or emerging diseases prioritized for the selected states
4. One Health Guidebook and other training materials were developed
5. 15+ training sessions were conducted in three states
6. 1000+ One Health workforce trained

4. Lessons learned for the wider global health community

It is vital to conduct training of the workforce at the interface of human-animal-environment for risk detection from the One Health perspective. Specific training sessions for the existing workforce from the human, animal, and environmental sectors are helpful for the implementation of the One Health approach, as most of them did not receive formal training on One Health. Training the community-level workers is crucial and of utmost importance, as they are the backbone of the system and the prime implementors. The One Health implementation looks challenging but fascinating, too, to work collaboratively with academia, researchers, government stakeholders, and private bodies. Future projects aiming to implement the one health approach need to understand the local context and should closely work with the concerned stakeholders. Cooperation between academia and government at the state level requires additional efforts but is a promising way to disseminate research results and secure impact on health challenges.

5. List of materials and publications produced

List of Materials

- 1) One Health Guidebook
- 2) One Health Wheel
- 3) One Health Posters
- 4) Case Studies



Figure 1 Materials developed for capacity building (One Health Guidebook, One Health Wheel and One Health Poster)

List of Publications

Published:

1. Yasobant S, Saxena D, Bhardwaj P, Quazi ZS. One Health system strengthening in India: Co-creating one health workforce to combat future pandemics. *Indian J Community Med* 2023;48:814-6. DOI: 10.4103/ijcm.ijcm_100_23

Under Review:

1. Yasobant S, Bhavsar P, Lekha K S, Patil S, Falkenberg T, Bruchhausen W, Saxena D. One Health Risk and Disease (OHRAD) prioritization tool: A tool to prioritize the risks for emerging and epidemic-prone diseases from One Health perspective. *Global Health Research and Policy*. (Manuscript Number: GHRP-D-23-00165)
2. Yasobant S, Patil S, Bhavsar P, Saxena D. Prioritisation tool to prioritize the risks for emerging and epidemic-prone diseases: A scoping review. *International Journal of One Health*. (Manuscript Number: IJOH-2023-11-075)
3. Yasobant S, Lekha K S, Patil S, Bhavsar P, Tadvī R, Patel K, Falkenberg T, Bruchhausen W, Saxena D. Prioritisation of Risks for emerging and epidemic-prone diseases in western India. *Journal of Epidemiology and Global Health* (Submission ID cb90485c-4092-4a82-ae54-b5ee64e3fd2d)

Under Preparation:

4. Impact of capacity building training on the knowledge of One Health workforce for disease control and pandemic prevention: Reflection from three western states of India.
5. One Health System Strengthening in India (OHSSIN): A One Health Initiative in Three Western States of India. (Target Journal: CABI One Health Cases)

6. Pictures

Media Outreach:

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Workshop on aspects related to epidemic-prone diseases on 29th

DATTA Meghe Institute of Higher Education and Research (DMIHER), Indian Institute of Public Health Gandhinagar (IIPHG), and Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur are jointly organising a State-level workshop on 'Prioritising Risks for Emerging and Epidemic-Prone Diseases in Maharashtra' on April 29 at MAFSU. It is part of One Health System Strengthening in India (OHSSIN) project. The 'One Health' approach recognises that the health of people, animals, and environment are inter-connected and that a multi-sectoral approach is necessary to address complex health challenges. The OHSSIN project aims at strengthening 'One Health' system in India by enhancing surveillance, laboratory capacity, and risk communication for zoonotic diseases. The State-level workshop will bring together experts from public health, animal health, and environmental health sectors to prioritise emerging and epidemic-prone diseases in Maharashtra based on their impact on human and animal health, as well as environment, stated a press release.

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Vigil for zoonoses to start from Ahmedabad, Anand

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Ahmedabad: With the possible origin of Covid-19 at a wet market in Wuhan, the pandemic underlined the peril of diseases where viruses or other pathogens get transmitted from animals to humans (zoonoses).

Embracing the concept of One Health, Gujarat has started an initiative to keep a close eye on outbreaks of diseases among animals and humans. The first workshop for this was organized at the Indian Institute of Public Health, Gandhinagar (IIPH-G) on Wednesday. On Thursday the team visited Anand Agricultural University (AAU).

Prof Deepak Saxena, lead for the Centre for One Health Education, Research & Development (COHERD) at the institute, said One Health can be understood as an integrated and multidisciplinary approach to understand the interconnected nature of health issues in animals and humans.

"The initiative is being carried out in association with the German Alliance for Global Health Research through GIZ GmbH, Germany. Two experts from Germany will be with us for this," he said, adding that apart from Gujarat, the project will also take place in Rajasthan and Maharashtra.

Dr S Yasobant, co-lead of COHERD, said the initiative

ONE HEALTH: EVERYTHING IS INTERCONNECTED

- The concept stresses early identification of microorganism transmission and diseases outbreak
- In the Indian context, experts will train health workers, veterinary experts, etc, to detect signs of diseases, including leptospirosis and avian flu
- In the recent past, Gujarat has seen an outbreak of glanders disease in horses and lumpy skin disease in the bovine population
- The concept takes into consideration factors such as temperature, deforestation, human-animal cohabitation, early disease history, etc, to understand local risks
- Real-time monitoring of diseases in both humans and animals will give early warnings of viruses that can mutate and spread diseases among humans

has members from the animal husbandry department, environment and health departments and the GGER Foundation, among others. "It will be launched after training of health workers in the Ahmedabad Municipal Corporation (AMC) and Anand, and will then be expanded to other parts. The idea is to mobilize ground-level workers to quickly identify the spread of a disease and raise awareness on preventing it," he said.

Some of the diseases identified by experts to look for in the Gujarat context are brucellosis, rabies, avian flu, leptospirosis, bovine tuberculosis, dengue and CHIKV (Chikungunya) haemorrhagic fever.

Experts zeroed-down on these diseases based on factors such as climate, human-animal interaction and previous outbreaks.

Dr Walter Bruchhausen, professor of Global Health at the University of Bonn, Germany, told TOI that detection of newly-emerging diseases is not the only feature of One Health, but has gained prominence due to the pandemic. "In the context of other countries, the approach has worked well for identification of early outbreaks of zoonotic diseases and early containment," he said, adding that they will be training experts on the prevalent risks in the local context.

BREAKING NEWS इंडिया न्यूज़
Date: 18/04/2023

Jaipur: बीमारियों की रोकथाम के लिए एक मंच पर सरकारी महकमे !

जोधपुर एम्स के स्कूल ऑफ पब्लिक हेल्थ, IIPH गांधीनगर, चिकित्सा विभाग की तरफ से संयुक्त जागरूकता कार्यक्रम, सीसीएचएफ यानी कांगो बुखार, लेटोस्पायरोसिस यानी रेट फीवर, स्कब टाइफस समेत कई तरह की उन बीमारियों की रोकथाम पर चर्चा, जो पशुओं और वातावरण से फैलकर लोगों को करती है बीमार, बीमारियों की रोकथाम के लिए चिकित्सा विभाग, पशुपालन विभाग, पर्यावरण विभाग को कार्यक्रम के जरिए लाया गया एक मंच पर

Glimpses of co-creation workshop:



Glimpses of capacity building:



7. Contact

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