

## ONE HEALTH IMPLEMENTATION FOR VILLAGE HEALTH AND LIVESTOCK VOLUNTEERS

Sivapong Sungpradit\*

Faculty of Veterinary Science, Mahidol University, Nakhon Pathom 73170, Thailand

Since 1997, One Health was incorporated in the mission of the Faculty of Veterinary Science, Mahidol University, Nakhon Pathom on account of its importance in health management, which should integrate human, animal and environmental health. Thus, a “One Health Village” project was established, with Kang Pla Kod village in Kanchanaburi province chosen as the pilot locale as it is located near the Mahidol University Kanchanaburi campus. The village’s problems were identified by a multidisciplinary team with collaboration from the villagers, and activities were established to solve those problems.

The One Health Village project has been initiated since 2014 to help the community of Klang Pla Kod village to solve their complicated problems using the One Health strategy. Our team found that there was a large gap in communication between academics and villagers, especially regarding zoonotic diseases transmitted from livestock and wildlife. Moreover, there are numerous reports of zoonotic diseases in Kanchanaburi province, viz. brucellosis, leptospirosis, tuberculosis, and rabies. In order to educate the villagers of these diseases and of the One Health strategy, it is necessary to alert academics of these challenges. In Thailand, there are around one million village health and livestock volunteers who are in the position to communicate health information to the villagers directly and effectively. Thus, a one-day workshop was held to train health volunteers of Klang Pla Kod village about One Health strategy in dealing with a local outbreak of zoonotic diseases relevant to their community.

In continuation of this important initiative, “One Health Implementation for Village Health Volunteers Workshop I, II and III” was held on 30 March, 17 May and 20 July 2017, respectively attended by 215 human health and 83 village livestock health volunteers from 13 districts of Kanchanaburi province, namely, Bo Phloi , Dan Makham Tia, Huai Krachao, Lao Khwan, Mueang, Nong Prue, Phanom Thuan, Sai Yok, Si Sawat, Tha Maka, Tha Muang, and Thong Pha Phum, were chosen to participate in the workshops.

---

\*Corresponding author: E-mail: [sivapong.sun@mahidol.ac.th](mailto:sivapong.sun@mahidol.ac.th)

Objective 3: Education and In-Service Training of Health Officers, Practitioners and Professionals (Current Workforce)

The participants were informed of the importance of zoonotic diseases, such as avian influenza, brucellosis, leptospirosis, rabies, *Streptococcus suis* and trichinosis. Participants had opportunities via group activities and discussions to update their knowledge of the causes of infections of interest and disease prevention using the One Health strategy. Six booths on different topics were set up manned by specialists to discuss issues and respond to questions (Fig). Depending on the topic of interest, participants were divided into six groups to allow everyone to participate and share their knowledge and experience. Furthermore, participants were encouraged to present strategies to solve their particular human and livestock health problems through One Health. Human and livestock health problems identified and suggested solutions are listed in Table. In addition, participants were encouraged to form collaboration among themselves and links with the experts to create networks to improve efficiency in solving local health problems in man and animal.

Tests were given before and after the workshop to evaluate understanding of One Health and the importance of zoonotic diseases. The increase in test scores cores was reassuring and more importantly, participants enjoyed the activities and felt they obtained a better understanding of One Health and importance of zoonotic diseases on human and livestock health.

Table 1

Human and livestock health problems identified and suggested solutions from the Workshop on One Health Implementation for Village Health Volunteers from 13 districts, Kanchanaburi province.

Problems	Tentative solution
Avian influenza	<ul style="list-style-type: none"> <li>- report suspected case to officer</li> <li>- quarantine suspected animals and use effective disinfectants or detergent for cleaning</li> <li>- do not eat or touch carcass of unknown death birds</li> <li>- not moving unknown carcass without permission</li> <li>- appropriate waste and carcass management</li> <li>- disease prevention by wear protective clothing</li> <li>- building public awareness</li> <li>- network building</li> </ul>
Rabies	<ul style="list-style-type: none"> <li>- disease prevention by pet vaccination, do not contact stray animals</li> <li>- building public awareness</li> <li>- network building</li> </ul>
Brucellosis	<ul style="list-style-type: none"> <li>- disease prevention by vaccination animal, wear protective equipment</li> <li>- appropriate waste and carcass management</li> <li>- building public awareness, do not drink raw milk</li> </ul>
Trichinosis	<ul style="list-style-type: none"> <li>- building public awareness, do not eat raw meat</li> <li>- provide disease information and prevention to related person such as farmer, slaughter house worker, butcher, consumer</li> </ul>
Leptospirosis	<ul style="list-style-type: none"> <li>- disease prevention by wearing boots when fishing</li> <li>- pest control and cleaning house, stables</li> <li>- building public awareness</li> <li>- network building</li> </ul>
<i>Streptococcus suis</i> infection	<ul style="list-style-type: none"> <li>- building public awareness, do not eat raw meat</li> <li>- provide disease information and prevention to related person such as farmer, slaughter house worker, butcher, consumer</li> </ul>

Objective 3: Education and In-Service Training of Health Officers, Practitioners and Professionals (Current Workforce)



Fig – Typical booth with a specialist explaining and answering questions from participants attending the Workshop on One Health Implementation for Village Health Volunteers, Kanchanaburi province.