A FRAMEWORK DEVELOPMENT TO PROMOTE COLLECTIVE ACTION IN COMMUNITY WITHIN ONE HEALTH HOUSEHOLD ENVIRONMENT PRACTICE TO PREVENT AND CONTROL DENGUE FEVER IN CENTRAL REGION OF THAILAND

Wachirawit Parunawin¹, Orapin Laosee¹, Weerawat Ounsaneha² and Cheerawit Rattanapan^{1*}

¹ASEAN Institute for Health Development, Mahidol University, Nakhon Pathom 73170, Thailand; ²Faculty of Science and Technology, Valaya Alongkorn Rajabhat University under the Royal Patronage, Pathum Thani 13180, Thailand

Dengue fever has recently become a major public health concern in the central region of Thailand. The key element of dengue prevention and control is household environment practice among household members and community participation through collective action using the multidisciplinary One Health strategy. This study developed a One Health household environment to prevent and control dengue fever. At the top three endemic areas in the country central region, 422 representative households were selected through a Knowledge, Attitudes, and practices survey for a household environment survey of household (HI), container (CI), and breteau (BI) indices, dengue community-based policies synthesis and One Health development. The majority of respondents were females and had primary school education; and those having a high level of knowledge, positive attitudes towards HEP and One Health, good personal preventive behavior, vector control management skill, social-level support, and community participation were more likely to support household environmental practices (p < 0.01). Entomologic survey based on HI, CI and BI indicated three endemic areas were at high risk (urgently needing prevention and control). Key gaps between dengue stakeholders and community-based program exist in most respondents' households were lack of awareness of appropriate practices in household environment management and of the promotion of community participation among stakeholders. Promotion of appropriate community-oriented program based on One Health integrated with risk analysis is a vital step towards a sustainable dengue prevention and control in central Thailand.

One Health Operation Research under THOHUN Research Grants

^{*}Corresponding author: E-mail: cheerawit.rat@mahidol.ac.th