

# KNOWLEDGE AND PRACTICES OF LEPTOSPIROSIS PATIENTS, THEIR NEIGHBORS, VILLAGE HEALTH VOLUNTEERS AND COMMUNITY LEADERS REGARDING LEPTOSPIROSIS PREVENTION AND CONTROL IN MAHA SARAKHAM PROVINCE, THAILAND

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**Abstract.** Little is known about leptospirosis prevention at the community level in Thailand. In this study we aimed to investigate knowledge and practices of study subjects comprising, leptospirosis patients, their neighbors, village health volunteers and community leaders regarding leptospirosis prevention and control in Maha Sarakham Province, Thailand, in order to inform a leptospirosis prevention and control program in the study province. Study subjects were chosen purposely and were interviewed following a structured form asking about knowledge and leptospirosis preventive practices. The results of interviews were then summarized and compared using ANOVA and independent-samples *t*-tests. A total of 167 patients, 325 neighbors, 320 community leaders and 480 village health volunteers were included in the study. The percentages of patients, neighbors, community leaders and village health volunteers who were male were 78.4%, 33.5%, 78.8% and 22.9%, respectively. The mean [ $\pm$ standard deviation, (SD)] ages of leptospirosis patients, neighbors, village health volunteers and community leaders were 53.6 ( $\pm$ 14.0), 53.4 ( $\pm$ 12.4), 49.7 ( $\pm$ 7.9) and 47.1 ( $\pm$ 9.2) years, respectively. The mean ( $\pm$ SD) of knowledge regarding leptospirosis of community leaders were the highest 30.3 ( $\pm$ 5.7) points. Thirty-two point three percent of patients and 39.7% of neighbors knew that cattle can get leptospirosis. Sixteen point eight percent of patients, 17.8% of neighbors, 23.3% of village health volunteers and 20% of community leaders knew that severe leptospirosis does not affect the heart. Neighbors had better practice about leptospirosis prevention than leptospirosis patients ( $p < 0.001$ ) whose mean ( $\pm$ SD) practice about leptospirosis prevention of neighbors and patients were 29.4 ( $\pm$ 3.0) and 27.8 ( $\pm$ 3.2) points, respectively. Seventy-two point five percent of patients and 49.2% of neighbors declared not to wear boots when they cleaned stable or worked in flooding areas. Sixty-three point eight percent of community leaders gave the results of leptospirosis prevention and monitoring campaigns to the community. There is a need for education regarding leptospirosis and its prevention for all the groups in our studies. Further studies are needed to determine the best methods to accomplish this.

**Keywords:** leptospirosis, knowledge, practices, prevention, communities, public health, Thailand

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