

## Knowledge, attitudes, practices and health beliefs toward Leptospirosis among urban and rural communities in Northeastern Malaysia

### ABSTRACT

**Background:** Leptospirosis is a zoonotic disease with a worldwide distribution, especially in developing countries such as Malaysia. This study was designed to explore the knowledge, attitudes, beliefs and practices (KABP) toward leptospirosis among the communities in northeastern Malaysia and to determine the sociodemographic factors associated with the KABP toward leptospirosis. A cross-sectional study using a stratified sampling method was conducted among 214 individuals in four locales in northeastern Malaysia. **Methods:** A cross-sectional study was conducted among 214 respondents in northeastern Malaysia using a multi-stage stratified random sampling method. The study population was divided into two groups based on geographical locations: urban and rural. All data were entered and analyzed using the IBM Statistics for Social Sciences (SPSS) version 22.0 software for Windows (IBM, Armonk, NY, USA). The continuous variables were presented using mean and standard deviation (SD), whereas the categorical variables were described using frequency and percentage. Multiple logistic regression was performed to determine the associated factors for good KABP toward leptospirosis among the respondents. **Results:** It was found that 52.8% of respondents had good knowledge, 84.6% had positive attitudes, 59.8% had positive beliefs, and 53.7% had satisfactory practices. There were no significant sociodemographic factors associated with knowledge and practice, except for educational status, which was significant in the attitude and belief domains. Those with higher education exhibited better attitudes (Odds Ratio (OR) 3.329; 95% Coefficient Interval (CI): 1.140, 9.723;  $p = 0.028$ ) and beliefs (OR 3.748; 95% CI: 1.485, 9.459;  $p = 0.005$ ). The communities in northeastern Malaysia generally have good knowledge and a high level of positive attitude; however, this attitude cannot be transformed into practice as the number of people with satisfactory practice habits is much lower compared to those with positive attitudes. As for the belief domain, the communities must have positive beliefs to perceive the threat of the disease. **Conclusions:** Our current health program on preventing leptospirosis is good in creating awareness and a positive attitude among the communities, but is not sufficient in promoting satisfactory practice habits. In conclusion, more attention needs to be paid to promoting satisfactory practice habits among the communities, as they already possess good knowledge and positive attitudes and beliefs.

**Keyword:** Knowledge; Attitude; Belief; Practice; Leptospirosis; Urban; Rural