

Assessment of Public Knowledge, Perception, and Attitudes Regarding Mosquito-borne Disease in Myanmar

Devin Metoyer, MPH¹, Myint Zu Min, Ph.D.², Ei Thandar Thein, B.S.³, Hnin Phyu Wai, B.S.³, May Myat Noe, B.S.³, Thazin Ko Ko, B.S.³ and Tomoyuki Shibata, Ph.D, M.Sc⁴, (1)Global Environmental Health LAB, Brooklyn, NY, (2)Mandalay, Mandalay, Myanmar, (3)Mandalay University, Maharaungmyay Township, Myanmar, (4)Northern Illinois University, DeKalb, IL

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Objective: To address the levels and associations of knowledge, perception, and attitude concerning mosquito-borne diseases held by the people of Myanmar. **Method:** A pilot study took place in four townships of Mandalay, the second largest city in Myanmar, with higher incidence rate of Dengue than Malaria. Myanmar is one of the countries in Southeast Asia with a concern of Zika Virus. There were 70 local residents (34% male and 64% female; ages 15 to 74 year with an average of 35 ± 15) who participated in interviews about demographics and knowledge and perception of mosquito-borne diseases and attitude toward mosquito control and disease prevention. **Results:** The survey showed that some local participants were not knowledgeable of certain vector-borne diseases. 88% and 92% of them believed that Zika Virus and Japanese Encephalitis were not transmitted by mosquitoes, respectively. On the other hand, they showed several mosquito-control and disease prevention practices. 81% of the participants covered household utility water and 79% drained and covered standing water around their households. In addition, 70% used mosquito-coil in their houses and 91% stated that they slept under mosquito nets. Attitudes also were influenced by other positive behaviors. For instance, people who found that protecting themselves against mosquito-borne disease was important, were 16 times (OR = 16; 95% CI 0.81-296; $p = 0.01$) more likely to sleep under mosquito-nets. Those who knew that standing water attracts mosquitoes were 1.4 times (95% CI 1.1-1.5; $p = 0.03$) more likely to apply mosquito repellent when outdoors. **Conclusion:** Further research and more intensive education efforts in the reduction of mosquito-borne disease including emerging and neglected tropical diseases would serve to aid the local communities to protect public health in Myanmar.

Environmental health sciences Epidemiology Public health or related education Public health or related research