

# Snakebite: Evaluation of knowledge among farmers in the state of Perlis, Malaysia

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## ABSTRACT

**Introduction:** Snakebite is a neglected occupational hazard for farmers. Snakes prefer seeking shelter in fields or farms, especially during human lockdowns. Most incidents occur in the northern states of Peninsular Malaysia, carrying high morbidity and mortality. This study aims to evaluate the knowledge level of snakebite among farmers in Perlis. **Methods:** A validated questionnaire, adapted from a previous study and translated into Malay, underwent content validation by Remote Envenomation Consultancy Services. **Results:** Farmers participated in face and construct validation, yielding a Cronbach's alpha of 0.765. The knowledge section consisted of two true-false and six multi-select multiple-choice questions. Dissemination was from January to June 2023, utilizing both paper and online formats through social media, the Department of Agriculture, and its agencies. A total of 106 farmers responded, with a mean experience of 15 years. Most were Malays, males, rice farmers, married, secondary school graduates, had a B40 household income, agriculture as their main income source, and had no prior snakebite experience. Self-rated and actual knowledge levels showed no significant agreement. The mean knowledge score was 15 (out of 35). No respondent answered all questions correctly. Misconceptions included placing sulphur around the house or bed (53.8%) and applying tourniquets to snakebite (70.8%), while only a few were aware of rinsing snakebite wounds (25.5%). Fruit farmers ( $p=0.042$ ) and having B40[B3-B4] income ( $p=0.034$ ) had higher odds of good knowledge level. **Conclusion:** There is a significant gap in knowledge among farmers. Collaborative efforts between agricultural and healthcare authorities are necessary to develop comprehensive snakebite prevention and management strategies.