Pesticide Exposure, Knowledge, Attitude and Practices (KAP) and Laboratory Findings of Farmers of Barangay San Ambrosio, Igbaras, Iloilo

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ABSTRACT

This is a cross-sectional study which aimed to evaluate the knowledge, attitude and practices (KAP) towards pesticide use, its health effects, and the laboratory findings of farmers from Barangay San Ambrosio, Igbaras, Iloilo. Specifically, it aimed to determine the association between the number of years of pesticide use and the farmers' MCV values. A total of 115 farm workers were interviewed and 109 (94.8%) of them reported pesticide usage. Among farmers who used pesticides, 90 (82.6%) consented to undergo CBC testing. Descriptive statistics was used for socio-demographic profile, KAP, and health effects of pesticide use. Whereas, Chi-square analysis was used to determine the association between pesticide exposure and MCV values. The farmers were knowledgeable about pesticides and its health effects, the route of entry into the body, and the fate of pesticide residues. Despite knowing the adverse effects of pesticides, 107 out of the 109 pesticide-using farmers (98.2 %) still agreed on the use of pesticides, and only 2 (1.8 %) were against it. They justified that pesticides are effective in killing pests to produce abundant crops and only some farmers knew that biological (61.5%) and natural control (63.3%) can be used as alternatives for pest control. In addition, most farmers (n = 94, 86.2%) used PPE when applying pesticides but were inadequate: with 81 (74.3%) using long-sleeved shirts, but only 17 (15.6%) using gloves, and 5 (4.6%) using eyeglasses. The lack of complete and proper PPE may be a factor for the self-reported health effects, such as dizziness (n = 59, 54.1 %), which was the most predominant, followed by burning sensation in eyes/face (n = 54, 49.5 %) and headache (n = 48, 44.0 %). No significant association was found between years of pesticide use and MCV using the chi-square analysis (χ^2 = 0.583, p = 0.318). It would be useful to minimise the use of pesticides, encourage alternative measures, lessen the time of pesticide spraying, and encourage the use of complete PPE. Prevention and intervention programmes regarding the use of protective measures and monitoring the health status of farm workers should be implemented.