

Incidence of Occupational Pesticide Poisoning Symptoms among Farmers in Naula Divisional Secretariat Area, Sri Lanka

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The use of agrochemicals particularly pesticides, has been increasing for the last few decades. Parallel to this increment, the risk of occupational pesticide poisoning (PP) has also been increased. According to the recent statistical data, there is an increased morbidity due to occupational PP. This descriptive cross sectional study was designed to assess the incidence of occupational pesticide poisoning symptoms among farming community. Total of 2303 participants were chosen from Naula divisional secretariat area, Sri Lanka, based on criteria checklist. The participants were subjected to a survey on monthly basis over a period of six months to identify the sociodemographic differences and the symptoms associated with occupational PP which manifested within 24 hours of pesticide application. Statistical analysis was done using the software IBM SPSS 16th version. The adjusted incidence rate for symptoms of occupational PP was 64.6% for six months study period. The cumulative number of reported symptoms associated with occupational pesticide poisoning was 13047 during the six months period. The commonest reported symptom (19%) was severe headache. In addition, vertigo and faintishness (16%), and burning sensation and irritation of skin (11%) were the other common reported symptoms whereas, shivering (0.6%) and chills (0.3%) were the least common symptoms. The ethnicity other than Sinhalese ($p < 0.001$), use of Trellis for farming ($p < 0.001$), more than 200 working hours per month ($p = 0.02$), more than 0.5 acres extent of land area spraying at a time ($p = 0.03$) and spraying session of more than 2 hours of duration ($p < 0.001$) showed statistically significant association with symptoms of occupational pesticide poisoning. More studies are required to test the methods of reducing the level of occupational pesticide exposure.

Keywords: Pesticide poisoning, Sri Lankan agriculture, Symptoms, Occupational hazards