

HIGH BLOOD PRESSURE IN PESTICIDE APPLICATORS AND ITS CONTRIBUTING FACTORS: A CROSS-SECTIONAL STUDY

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Abstract

This study aims to evaluate the prevalence of high blood pressure (HBP) and its contributing factors in pesticide applicators in Cibodas Village where chemical pesticides were heavily used. A total of 90 pesticide applicators participated in this cross-sectional study. The information on occupational characteristics was obtained using a structured interview-administered questionnaire and then used to calculate the intensity level and cumulative exposure level (CEL). Blood pressure was measured using an upper arm digital blood pressure monitor. Data were summarized descriptively and statistical analysis using the chi-square was performed with significance set at $p < 0.05$ and all p-values were two-sided. The majority of the participants were men with a mean age of 44 years. 94% of participants frequently used a combination of pesticides. The overall prevalence of HBP in this study was 48.9%. Age > 44 years, BMI ≥ 25 Kg/m², and high-intensity level group were associated with high BP. The high blood pressure of pesticide applicators was associated with pesticide exposure. This result supports the notion of the importance of multisectoral collaboration to provide knowledge on the potential health impacts of pesticide exposure and comprehensive training on the proper handling of pesticides.

Keywords: high blood pressure, pesticide, applicators,