

ABSTRACT

Effects of pesticides exposure on human cardiorespiratory health were investigated. In addition to this, knowledge about pesticides handling and common agricultural practices in these subjects were studied. The study group consisted of 145 individuals of same socio-economic status, including 105 farmers and sprayers exposed to pesticides versus 45 non-exposed individuals in the study area of Lahore, Pakistan. A designed questionnaire was used for evaluating the agricultural work practices and self-reported health issues. Different health parameters were studied including systolic and diastolic blood pressure, body mass index, heart rate, and peak expiratory flow rate. Among these parameters body mass index and peak expiratory flow rate of farmers and sprayers exposed to pesticides without personal protective equipment was significantly decreased as compared to non-exposed group whereas there was no significant difference in heart rate and blood pressure of both groups. Farmers and sprayers who did not use any protective measures showed significantly higher incidence of health issues including skin irritation/rashes, headache, eyes irritation, coughing and breathlessness during or after spraying pesticides. Hence, pesticide exposure within the studied population has been found to be associated with respiratory parameters.