Abstract

Acute intoxications and side effects observed in agricultural field workers from different rural areas in Mexico are mainly related to their job orientation and the lack of knowledge about handling pesticides in a proper way. In this paper we present the results obtained from a systematic study in which we identify different cases of acute intoxication according to the job orientation and ways of handling pesticides of people involved in agriculture activities developed in Tejupilco, a community of the Estado de México state. Thirty-five individuals who showed acute pesticide intoxication (IAP) were selected for this study. A survey was specially designed for this purpose, and then applied to each one of them. Statistical analysis (using descriptive statistical methods) on data from sample surveys showed that 15.6% of acute intoxications were intentional, while 71.8% occurred due to their exposure to pesticides during agricultural activities; 78.0% were male gender. People aged 11 to 20 years old represent 36.0% of the cases of acute intoxication. The most frequent means of intoxication was by inhalation (respiratory system) with 48.5% of the cases. From all the cases, only 54.3% sought medical assistance after intoxication symptoms arose. Organ-phosphorates were involved in 44.0% of intoxication cases; 88.6% of people use pesticides in cornfields; 11.4% dealing with agriculture did not have previous training in handling pesticides. In 54.3% of the cases, the handling of pesticides was regarded as inappropriate. It is important to emphasize that 88.2% had meals at places were pesticides are used, 74.2% had no protection outfit and 34.2% did not follow label instructions for handling pesticides safely. Regarding to their personal habits, 11.4% do not wash their hands and 28.5% do not take showers after being in contact with pesticides. In spite of the risk of handling pesticides and having an IAP episode, people dealing with pesticides had inappropriate attitudes, an issue that requires immediate attention in order to implement methods of prevention of intoxications for employees exposed to pesticides.

Keywords
pesticides, acute intoxication, handling of pesticides