Violent Deaths associated with Consumption of Psychoactive Substances in Mexico City

Abstract

Authors: Bustos-Vázquez Eduardo[1], Sánchez-Maya Angélica[2]

Objective: To estimate the association between violent deaths and the consumption of psychoactive substances reported in toxicological tests of people who died in Mexico City during the period 2009-2012.

Material and Methods: The necropsy reports between 2009 and 2012 of the Institute of Forensic Sciences of Mexico City were collected in order to form a census that included the registry of the characteristics, diagnosis of the cause of death, and results of the toxicological tests of deceased people. The variable of interest was the cause of death of the deceased. Explanatory variables, such as the consumption of psychoactive substances prior to death, characteristics of the deceased and characteristics of the medical care, were included. A multivariate logistic regression model was used to determine factors associated with violent deaths.

Results: The prevalence of deaths associated with the consumption of psychoactive substances declined significantly from 23.39% in 2009 to 13.50% in 2012. 28.21% of the deceased people consumed some psychoactive substance. People who consumed psychoactive substances were more likely to have a violent death (OR_A= 1.40, 95% CI: 1.01-1.94%), where homicide was the number one cause (27.84%). Being a male (OR_A= 1.43, 95% CI: 1.07-1.93) with a high school level study (OR_A=3.14, 95% CI: 2.03-4.86%), being a worker (OR_A= 2.00, 95% CI: 1.34-2.97%) and live in free union (OR_A=1.55, 95% CI: 1.05-2.30%) were associated with a greater increase in the possibility of dying from a violent death. Alcohol was the most-frequently-consumed substance (30.98%, 95% CI: 28.51-33.56%).

Conclusions: Social, cultural, and economic changes occurred in the last decades in Mexico have favored the contribution of the consumption of psychoactive substances in the triggering of violent deaths, such as accidents, homicides, and suicides. It is necessary to continue documenting patterns of consumption of differentiated substances for men and women that allow it to strengthen public policies on prevention.

Keywords: causes of death, drug effects, homicide, foreign toxicology, alcohol

Affiliation:

1. Center for Research in Health Systems, National Institute of Public Health, Mexico.
2. Institute for the Care and Prevention of Addictions in Mexico City