

MO-13

Trends and methods of suicide in Nepal: a retrospective data analysis

Rakesh Ghimire¹, Dhiru Basnyat², Pranil Man Singh Pradhan³, Akritee Pokharel¹, Sangha Ratna Bajracharya¹

¹Department of Clinical Pharmacology, Institute of Medicine, Tribhuvan University, Nepal; ²Crime Investigation Department, Police Headquarters, Nepal; ³Department of Community Medicine and Public Health, Institute of Medicine, Tribhuvan University, Nepal

Objective: The objective of the study was to demonstrate the trends of suicide in Nepal and estimate the prevalence of poisoning along with the types of poison used for suicide.

Methods: All the suicidal cases of the country registered over the period of 3 years between 16th July 2014 and 16th July 2017 were retrieved from Crime Investigation Department of Nepal Police. Information on different types of poisons used for suicide within the same period of time were retrieved from Nepal Police Forensic Science laboratory. A full review was done which included demographic data and methods of suicide each year. Descriptive statistics were used to show the percentage of suicides in different categories in each year, the percentage of suicides by poisoning and different types of poison ingested.

Results: A total number of 14,176 deaths due to suicide were reported in Nepal Police during the study period. Most common mode of suicide was found to be hanging which showed increasing trend from 71.6% in 2014/2015 to 73.3% in 2016/2017. The second leading method of suicide was poisoning which showed decreasing trend from 25.1% in 2014/2015 to 23.7% in 2016/2017. The least common method was electrocution with 8 cases during the study period. Suicide was more common in male (54%) as compared to female (46%). Out of total number of 1707 deaths by poisoning, organophosphorus (66.6%) was the most common compound, followed by phosphides (21.7%), organochlorines (11.1%) and carbamates (0.4%). Highest prevalence of suicide by poisoning was reported in central region of the country.

Conclusion: The burden of suicide is one of the major public health problems which is increasing day by day in Nepal. Hanging and poisoning were the leading methods of suicide and organophosphorus was the most common compound used for self-poisoning. The burden of suicide needs to be addressed as one of the major cause of preventable deaths in the country. National strategy for suicide prevention with concrete action plans and interventions need to be done.