

An Epidemiological Study of Poisoning Cases Reported to the Nepal Drug and Poison Information Center, Kathmandu

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Introduction: Poisoning is a major public health problem worldwide. In Nepal, the development of applied chemistry in industry, agriculture and household use has been more rapid than the development of child safety, worker protection, and environmental health concerns. The poison center serves as the champion of these less illuminated but important needs. Many Nepali citizens have ready access to a variety of dangerous chemicals, which was unheard of just 20 years ago. Pharmacists with clinical toxicology expertise provide the consultation. The center operates 24 hours a day and 365 days in a year. It has 24 hours link with Central Ohio Poison Center and number of US board certified clinical toxicologists for backup. **Objective:** This study sought to analyze the patterns of poisoning in Nepal based on the telephone calls to the center concerning human poisoning exposures from July 1997 to June 2007. **Methods:** Total of 24, 143 incoming calls received by the Nepal Drug and Poison Information center during 10 years period that consisted of 17,539 human exposures, 5,010 drug information, 1,107 medical information and remaining 487 other miscellaneous information. All the human poisoning cases were analyzed for age, sex, caller site, and intent of exposure, time of call, outcome, and agents involved. **Results:** Over 61% (10,761) calls involved persons older than 20 years. Female to male ratio was 1.9:1. Seventy five Percent (11,385) and 24.2% (4,247) calls were from hospitals and general public respectively. Maximum numbers of calls were received between 3-9 PM which accounted over 53% (9,395) of total human exposure calls. 3.6% (635) deaths among 14,622 calls and aluminium phosphide followed by organophosphates were the most commonly involved in those deaths. 63.7% (11,169) calls were concerning suicidal patients. Agricultural agents accounted for 55.5% (9,733) cases followed by drugs (25.9%, 4555), household agents (12.1%, 2129) and plants (4.6%, 799). Among the agricultural agents, insecticide leads the cases, 64.5% (6,567) followed by rodenticide 21.5% (2,094). Among the therapeutic agents, hypnosedative tops the list followed by analgesic/antipyretics. **Conclusion:** Suicidal poisoning is a major public health problem in Nepal. Pesticides accounted for more than half of the cases. Establishment of suicide prevention center with 24 hours crisis hotline and optimum use of existing poison information center's resources can play significant role in reducing number of deaths from deliberate self poisoning.