

8th World Congress on
TOXICOLOGY AND PHARMACOLOGY
April 13-15, 2017 Dubai, UAE

Pattern of acute organophosphorus poisoning at University of Gondar Teaching Hospital, Northwest Ethiopia

Getnet Mequanint Adinew, Assefa Belay and Eshetie Melese Birru
University of Gondar, Ethiopia

Background: Despite the apparent benefits of organophosphate compounds (OPCs) acute organophosphate (OP) pesticide poison is an increasing problem worldwide. In a country like Ethiopia, where agriculture is a major component of the economy, these compounds are readily available to the general public. There is paucity of evidence from Ethiopia showing the pattern of organophosphate poisoning (OPP) in healthcare facilities.

Objective: The objective of this study was to evaluate retrospectively the pattern of acute OPP at the University of Gondar Teaching Hospital in northwest Ethiopia, conducted during September 2010 through December 2014. Data was collected through chart review of patients who were admitted due to poisoning. Data was analyzed using SPSS 20.

Result: OPP in University of Gondar teaching hospital accounts for about 38.46% of all emergency room admissions for poisoning. Out of the 90 cases studied 60% (54) were women, with male to female ratio of 1:1.5. The mean age of the patients was 25.5 with a standard deviation of 9.45. 56.7% of the cases studied lived in an urban environment compared to 43.3% who lived rurally. In the vast majority of patients, 90% (81) patients had ingested OP as an act of suicide. Regarding the route of exposure, oral ingestion was most common in suicidal cases (88.9%). The elapsed time between the time of poison ingestion and the start of the treatment, ranged from 13 minutes to 1 day. Health care professionals' used decontamination methods such as gastric lavage and activated charcoal (45.6%) and 36.7% used atropine for OPP treatment. The mean hospital stay was 0.74 days. In the present study family problems were a leading cause of suicides and accounted for 45.8% of all cases.

Conclusion: As a developing nation whose economy relies heavily on agriculture, Ethiopia continues to have OP compounds remain a common cause of acute poisoning. This is particularly concerning for younger generation who have high rates of OPP and whose numbers continue to raise. This data suggests that it is essential to strengthen Ethiopians regulatory policy concerning the availability of OPCs. Additionally, it will be important to design an appropriate health education program for the prevention of both suicidal and accidental OPPs for the benefit of the public at large.

getnet.mequanint@yahoo.com, gmequanint21@gmail.com