Abstract:

A common medical emergency is poisoning, irrespective of whether it is intentional or accidental. Poisoning is a significant global public health problem. According to WHO data, in 2012 an estimated 193,460 people died worldwide from accidental poisoning and a million people die every year because of self-poisoning with suicidal intent.

Introduction:

Sixty patients were enrolled in the study.This study describes 4 years profile of poisoning patients from September 2014 to October 2017 at a tertiary Care teaching hospital.The present study has been undertaken to identify/study as to what is the most common substance used as poison,the trends among different genders/age,the time interval between poisoning and arrival in Emergency department,the morbidity associated,mortality and some other aspects which we are going to discuss later on.

Context:

Poisoning is an acute medical emergency and is associated with a very high morbidity and mortality.Previously, the poisoning deaths from pesticides were mainly accidental but easy availability, low cost and unrestricted sale have led to an increase in suicidal and homicidal cases as well. In the developed world, poisoning due to narcotics and drug over dosage is far more common than due to pesticides.

Aims:

Retrospective descriptive study to explore the epidemiological characteristics and clinical profile of patients presenting with poisoning in emergency department of a tertiary care teaching hospital in northeast India. ICU/Hospital length of stay,any mortality during stay and follow up after 28 days from 2014 to 2017 were done.

Population:

All the patients (irrespective of age) presented with the alleged history of any poisoning between the year 2014 to 2017 were screened from the emergency register. The patients who received the discharge diagnosis of “Alleged Poisoning” and confirmed poisoning were enrolled in the study. Confirmed poisoning cases

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were made out by clinical as well as laboratory testing. Autopsy reports of deceased patients of alleged poisoning cases were not available but nonetheless those cases were included in study.

Material and Method:

Institutional review board/ Ethics committee clearance with wavier of consent: Since this was a retrospective study and did not involve the disclosure of any individual patient identity, the consent was waived. All the patients (irrespective of age) presented with the alleged history of any poisoning between the year 2014 to 2017 were screened from the emergency register.

Results:

- *Gender*– The males marginally outnumbered female patients. Though majority of the patients were males, profession wise females showed uniformity in being Housewives while male patients had varied background from students to farmers to workers.
- *Cause*– Poisoning with suicidal intent was more frequent (>90%) than accidental.
- *Time Interval*– The mean time interval between poison consumption and arrival to hospital was 4.7 hours.
- *Characteristics*-The most common type of substance used as poison was found to be **ORGANOPHOSPHORUS compounds**(63%) readily available as Pesticides.Other substances included Pesticides such as Aluminium Phosphide, household cleaning items such as Phenyl,Medicines such as Benzodiazapines,TCA,Hair dye agents such as “Super Vasmol”, Kerosene and some unidentified/undetected substances as well.
- The most lethal poison was found to be Aluminium Phosphide.
- *Symptoms*-The most common symptoms were vomiting and restlessness and 28% of cases presented with a GCS of less then 10.
- *Mortality*-ICU and Hospital Mortality was 5 cases (9.09%), whereas 28 days mortality was 4 cases (7.27%) .

Discussion:

Poisoning is a major public health hazard. As per WHO, mortality rate attributed to poisoning in the year 2015 was 1.9 per 100000 population.As majority of poisoning are suicidal, it implies the ready availability of potentially poisonous substances

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such as pesticides and drugs. Stringent rules regarding their dispensing coupled with proper Government initiatives either through its organizations or through the help of NGO s could bring about a decline in Poisoning cases. People must be educated and counseled about deliberated poisoning and its aftermath which leaves behind a mental,physical,emotional and financial scar not only to self but also to the family,society and the country.

This is the first large descriptive study on the clinico-epidemiological profile and the treatment outcome of the poisoning cases from a tertiary care center of northeast India.

We intend to continue this study, follow up cases will be published with more details.

There is no conflict of interest with anyone.

No financial help is taken from anyone.

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