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Targeting 100% Survival In Toxicology Cases

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Introduction:-

- WHO states, globally more than three million of acute poisoning cases with 2, 20,000 deaths occur annually. (WHO-1999).
- It has been estimated that, in India five to six persons per lakh of population die due to acute poisoning every year. (Narayana Reddy, 2010).
- Poisoning is the fourth common cause of mortality in India. (Unikrishnan et al., 2005)
- According to various studies organophosphate forms the commonest poisoning agent¹.
- Mortality in organophosphorus is 18to20%^{2,3}.

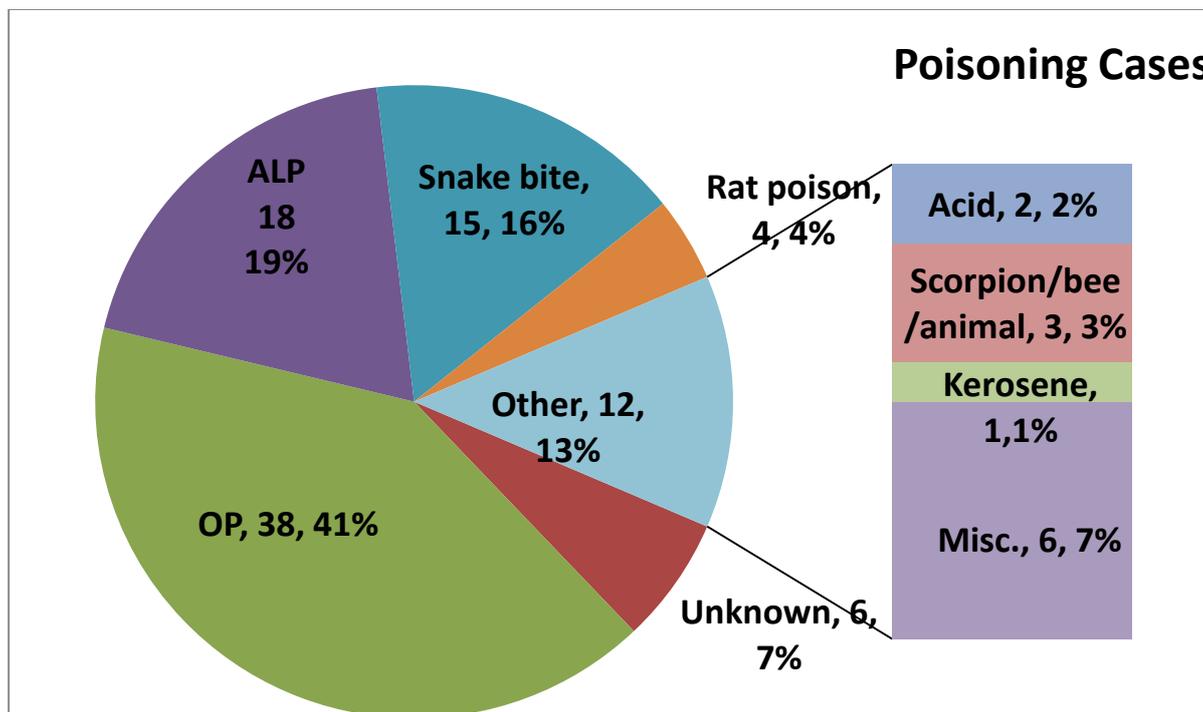
Keywords:

1. Alumunium phosphide, 2.hemodialysis, 3.CRRT(continuous renal replacement therapy, 4.organophosphates.

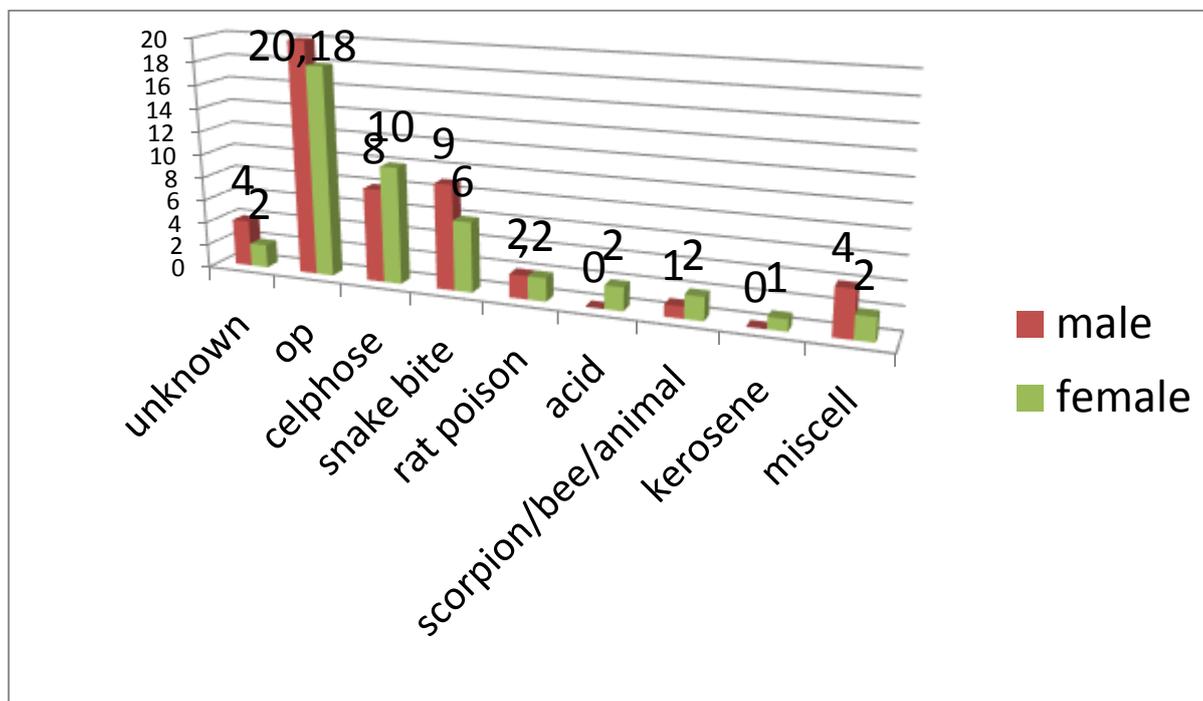
It was observed that in rural & semiurban population of India,organophosphorus outnumber all poisoning cases (25%of all cases) & second most important is Alumunium phosphide(cephos)(24% of all acses reported).Both are serious causes for morbidity and mortality among all poisoning cases.The third important is snake bite(21% of all cases) ,which carries less morbity & mortility,if diagnosed & treated in time at a reasonable good center by qualified personnel.

Number of toxicology cases= 93

Prospective Study Period =February 13 to November 14

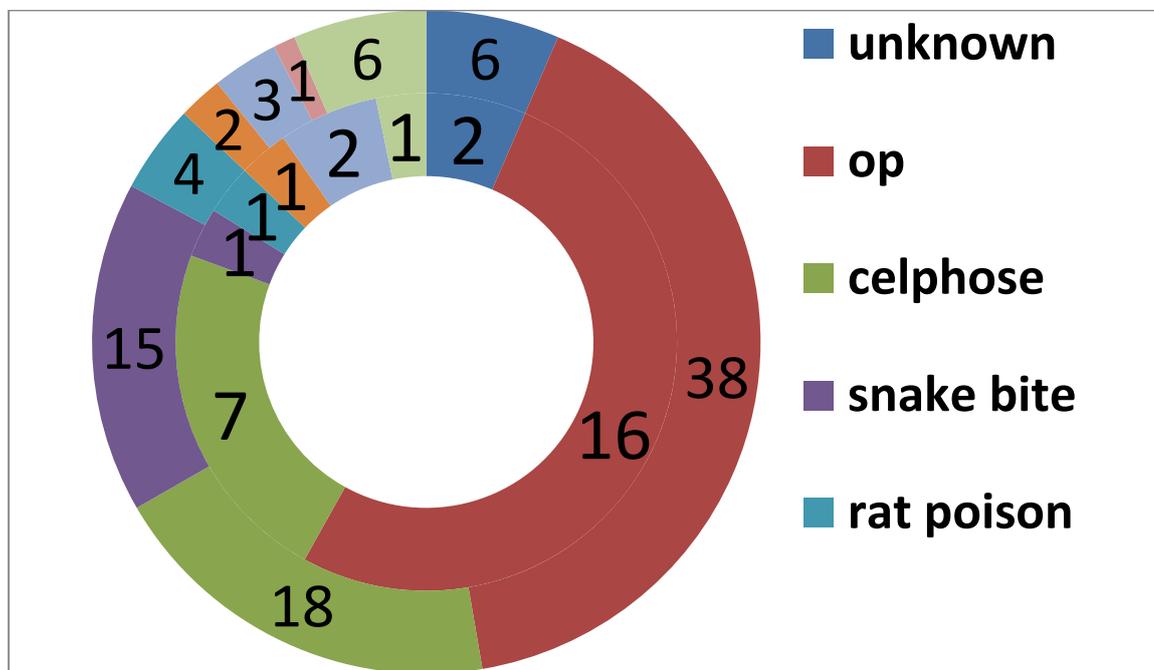


Sex distribution:-The sex distribution was showing preponderance of some sex in particular type of poisoning as depicted in the chart.



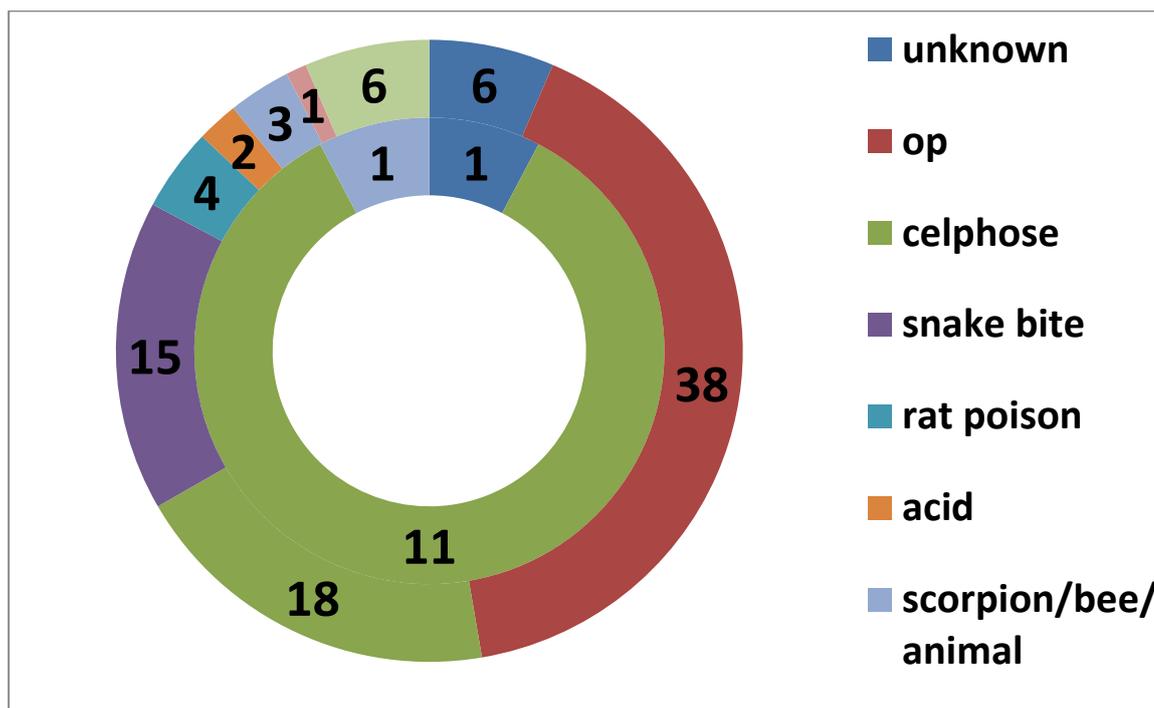
Ventilator required:-

The requirement of mechanical ventilation is depicted in the diagram. It is quite evident that most of the cases of organophosphorus poisoning patients required mechanical ventilator support in ICU as a primary tool in management & subsequently in the outcome of the patient.



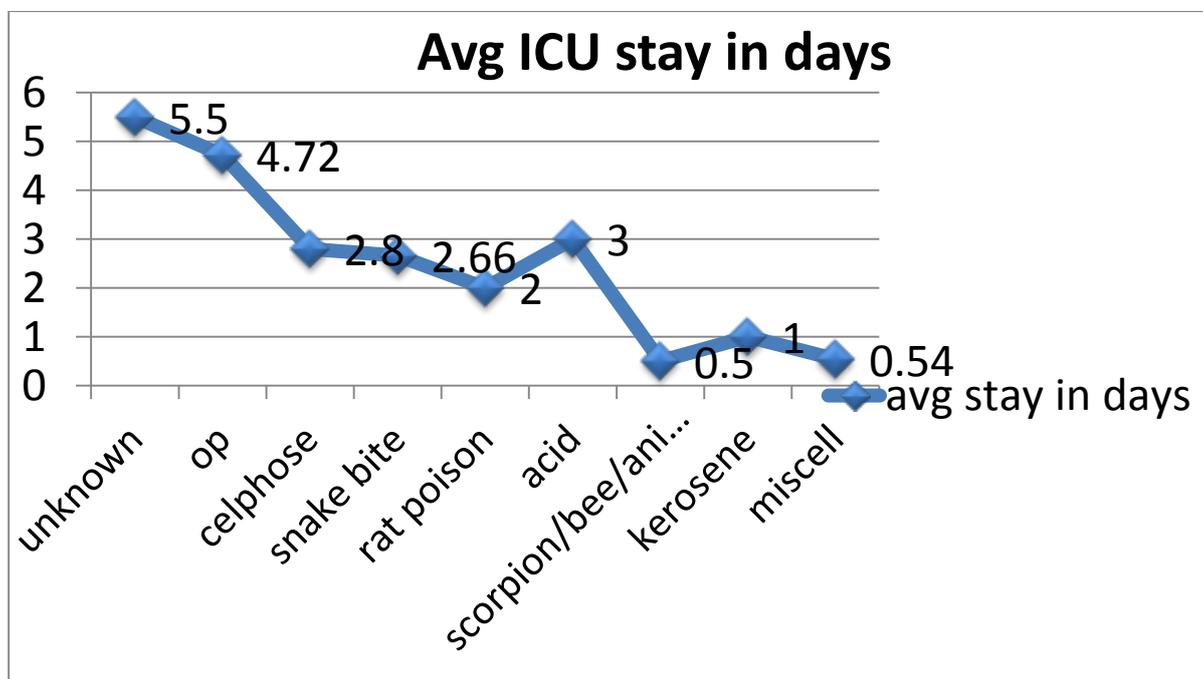
HD/CRRT required:-

Hemodialysis/CRRT was a requirement in most of the cases of aluminum phosphide poisoning, & it affected the prognosis vertically.

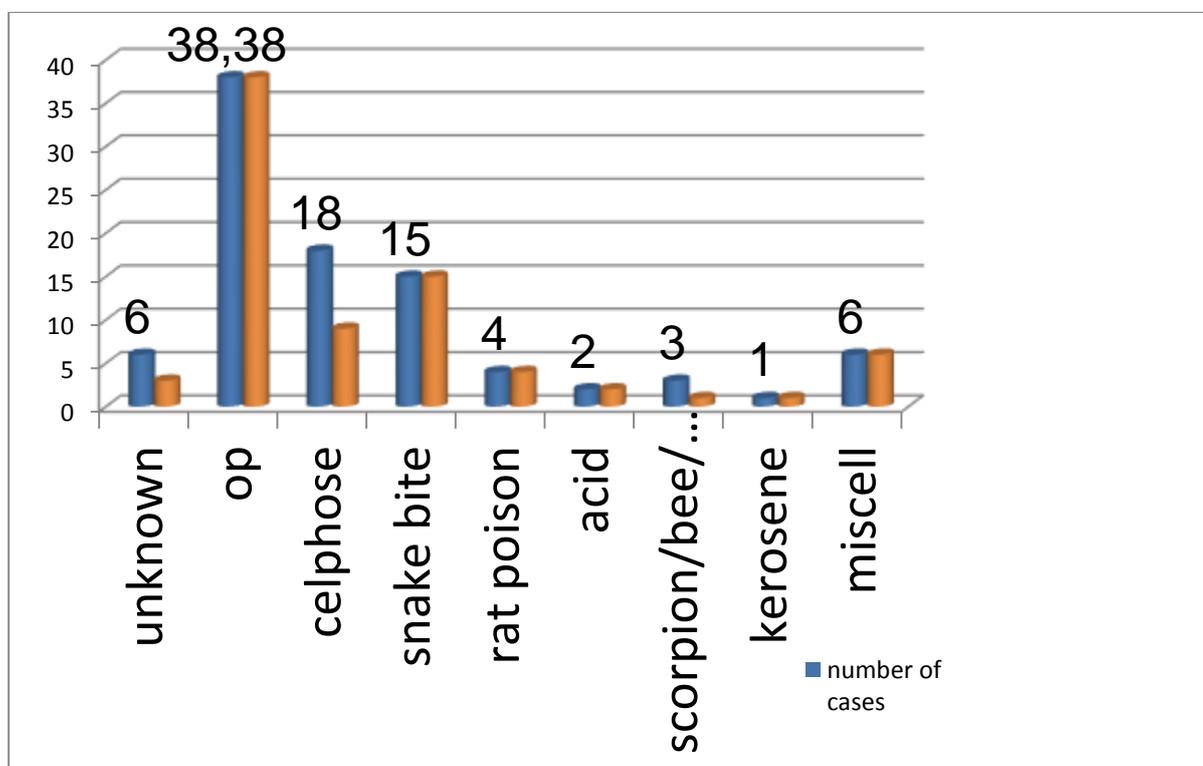


Average ICU stay (in established cases of poisoning):-

It was maximum in organophosphorus poisoning, while it was least in kerosene ingestion, scorpion bite, bee stinging animal bite etc.



Toxicology cases survival:-



Aluminum phosphide (Celphos):-

The poisoning has a very high mortality rate, yet a ray of hope is always there in darkness of cloud.⁴

This poisoning has a high mortality (40–100%) and survival is unlikely if more than 1.5 g is ingested. The lethal dose is 150–500 mg for an adult⁵.

Targeting 100% survival in poisoning cases-***Celphose:-**

1. Very aggressive management of metabolic acidosis/massive bicarbonate therapy
2. Early institution of HD/CRRT/SLED
3. Inotrops

***Organophosphorus poisoning:-**

1. Apart from decontamination, supportive treatment.
2. Early PCT
3. Early mechanical ventilation
4. PAM in non carbamate poisoning

***Snake bite:-**

1. ASV
2. Early identification and management of complication like
 - ❖ Intracranial hemorrhage
 - ❖ Coagulopathy
 - ❖ Muscle weakness
 - ❖ Necrosis

Conclusion:-

Early identification with definitive care is the gold standard in management of poisoning. Early aggressive management with recognition of complications & their management remains the

mainstay & has a significant prognostic value in the treatment of poisoning.

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