

EPIDEMIOLOGICAL STUDY OF POISONING CASES IN COASTAL ANDHRA PRADESHAnand Acharya¹, M. Ashok Chakravarthy²**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: - Acute poisoning is one of the common causes of admission in emergency department of various hospitals. This is a common socio medical problem. Green revolution has increased the production of food grain but the wide spread use of organophosphorus compounds has increased incidence of its poisoning to the human kind by accidental or suicidal. Around one hundred fifty six patient admitted in Konaseema Institute of Medical Science and General Hospital with diagnosis of acute poisoning. The present study showed that majority of the patients was of young age with females outnumbering males.

KEYWORDS: poisoning, organophosphorus, coastal Andhra Pradesh, epidemiology.

INTRODUCTION: Acute poisoning is one of the common causes of admission in emergency department of various hospitals. This is a common socio medical problem. Green revolution has increased the production of food grain but the wide spread use of organophosphorus compounds has increased incidence of its poisoning to the human kind by accidental or suicidal. But in addition to that various other drugs and toxic substances are available and are used by people. Accidental poisoning is more common in children but homicidal poisoning is common in young adult. So morbidity and mortality in adult and working group is of great concern.¹ Management of this will greatly improve if the common causes of poisoning are properly defined.

MATERIAL AND METHOD: This is a retrospective study in which all the data of acute poisoning cases admitted in Konaseema institute of medical college and general hospital, the only referral hospital of Konaseema part of Andhra Pradesh in last two years that is November 2011 to November 2013 is collected. Details of the patient were collected from bed head ticket as it contains all the information. The clinical diagnosis of the nature of the poison consumed was based on Reliable History, presentation of the remaining stuff/container from which the poison had been consumed/gastric aspirates and suggestive clinical picture. Information regarding the poison and drugs consumed by patient was also obtained from patient relative who was accompanied him. All the information regarding the drug and patient like age, sex, marital status and outcome of treatment was noted from records on a separate Performa for each subject.

RESULT: Around one hundred fifty six patient admitted in Konaseema institute of medical science and general hospital with diagnosis of acute poisoning. As per table-1 male was affected more than female that is 60.3%. Table-2 indicates that incidence of poisoning was more in married individual that is 65.4%. Peak incidence of age of poisoning was between 15 -30 year of age but incidence was less in above 70 year of age. Incidence of death due to poisoning is more in elderly than in younger age group. Out of all the poison which is consumed organophosphorus is the most commonly abused

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one that is 34.6%. Various drugs was abused that include drugs acting on CNS but most common drug which was abused was Alprazolam that is 7.1%.

Characteristics	Statistics	Poisoning Cases (N=156)
Age (Years)	N	156
	Mean (SD)	29.3(12.03)
	Median	25.0
	Q1, Q3	20, 35
	Min, Max	12, 70
Age Group (Years)		
<15	n (%)	1(0.6)
15-30	n (%)	98(62.8)
30-45	n (%)	35(22.4)
45-60	n (%)	15(9.6)
>=60	n (%)	7(4.5)
Sex		
Male	n (%)	94(60.3)
Female	n (%)	62(39.7)

Table 1: Summary of Demographic characteristics of the Victims

Marital Status	No. of Cases (N=156)	Percentage (%)
Married	102	65.4
Unmarried	54	34.6

Table 2: Marital Status of the victims

Age Group	Poisoning cases n (%)	Expired n (%)	Recovered n (%)
<15	1(0.6)	0	1(100.0)
15-30	98(62.8)	3(3.1)	95(96.9)
30-45	35(22.4)	2(5.7)	33(94.3)
45-60	15(9.6)	1(6.7)	14(93.3)
>=60	7(4.5)	2(28.6)	5(71.4)

Table 3: Incidence of Mortality due to poisoning by age group

Poison Abused (N=156)	No. of Cases	Percentage (%)
Alprazolam Poisoning	11	7.1
Amitriptyline Over Dose	1	0.6
Carbamazepine Over Dose	1	0.6
Carbofuran Poisoning	1	0.6
Chlorpyrifos & Kerosene Poisoning	1	0.6
Chlorpyrifos Poisoning	1	0.6

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Chlorpyrifos & Validamycin Poisoning	1	0.6
Chlorpyrifos Poisoning	2	1.3
Clonazepam Poisoning	1	0.6
Clonazepam Poisoning	1	0.6
Cypermethrin Poisoning	3	1.9
Cystone Poisoning	1	0.6
Diazepam Poisoning	1	0.6
Drug Over Dose	8	5.1
Endosulfan Poisoning	11	7.1
Gammoxene Poisoning	5	3.2
Herbicide Poisoning	1	0.6
Hexaconazole Poisoning	7	4.5
Imidacloprid Poisoning	1	0.6
Ingestion Of Anti Diabetes Medicine	1	0.6
Ingestion Of Phenol	2	1.2
Insect Bite	1	0.6
Insecticide Poisoning	5	3.2
Kerosene Poisoning	3	1.9
Levofloxacin Poisoning	1	0.6
Methylparathion Poisoning	1	0.6
Oleander Poisoning	5	3.2
Organo Phosphorus Poisoning	54	34.6
Organochlorine Poisoning	2	1.3
Parathion Poisoning	2	1.2
Phorate Poisoning	4	2.6
PVC Solvent Cement Poisoning	1	0.6
Quinophos Poisoning	1	0.6
Rat Poisoning	2	1.3
Risperidone & Oxcarbazepine Poisoning	1	0.6
Snake Bite	1	0.6
Trihexyphenidyl Poisoning	1	0.6
Unknown Drug Poisoning	4	2.6
Unknown Poisoning	1	0.6
Zinc Phosphide Poisoning	4	2.6

Table 4: Distribution of Commonly Abused Poisons by the Victims

DISCUSSION: Total one hundred fifty six patient admitted in Konaseema institute of medical science and general hospital with diagnosis of acute poisoning. Incidence of poisoning was maximum in younger age group that is 15 to 30 years which is found in other studies also.²⁻⁶ This group of people is exposed to more stress of life and belongs to most productive age group. So exposure to poison among this age group is the major problem. Male are more affected than female that is 60.3% which tallies with other studies.^{2,5,7,8} Mortality is more among the older age group. Organophosphorus is

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the most common poison consumed because of its easy availability in this area because its use in agriculture. Although there are restrictions on sale of drugs and drugs control in India, vulnerability to insecticide cannot be ignored. It is also found that various other drugs was used which is not the over counter available drug. They are easily available to general people is of serious concern.

CONCLUSION: The present study showed that majority of the patients was of young age with females outnumbering males.

Exposure to poison or use of poison for suicidal purpose among productive age group and easy availability of drug is serious concern for society.

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