

Short Communication

Study of Modes Deployed in Attempted Suicide in the Indian City of Bhopal

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ABSTRACT

The world has witnessed tremendous development in the last few decades. Even in India, the standard of living has improved in general. Literacy rates are improving. More and more people are aspiring for better jobs, better salaries, and higher professional satisfaction. This is pushing society towards materialism. Excessive stress and anxiety to cope with material and professional pressures sometimes lead to suicidal attempts. This retrospective study was conducted in a major city (Bhopal) of the Indian state of Madhya Pradesh to analyze the common modes deployed in attempted suicide.

The commonest method of attempting suicide was found to be poisoning or drug overdose. Among poisons, organophosphorus compounds top the list on account of their widespread use in agricultural, industrial and domestic situations, making them easily available.

Key Words: Poisoning; Attempted suicide; Organophosphorus compound

Introduction

Attempted suicide is an act with non-fatal outcome in which an individual deliberately attempts self harm by traumatic means, or by ingesting a poisonous substance or a pharmaceutical drug in excess of the prescribed therapeutic dose.¹

There is no period in the history of mankind that has not witnessed suicidal attempts. However, in recent times attempted suicide is on the rise, resulting in a serious

social and public health problem. The final act of attempting to take one's own life is often impulsive. The immediate availability of poisons or other such substances in the vicinity and loneliness are crucial factors in facilitating such behaviour. Suicidal attempts are said to be twenty times more frequent than completed suicide.²

This study was conducted from 2006 (Dec) to 2007 (Nov) in the departments of medicine and psychiatry, Hamidia Hospital, Gandhi Medical College, Bhopal. One hundred and thirty two patients admitted in the medical wards following attempted suicide, were enrolled in the study. Male:female ratio was 50:82 (0.61). All cases were subjected to detailed history, clinical evaluation and relevant investigations.

Results and Discussion

Ingestion of poisons or fatal doses of drugs accounted for the commonest mode of attempting suicide in this study as compared to other modes. This has been reported in several other studies also.³⁻⁶ The availability or feasibility of a particular mode or method plays a very important role in attempted suicide which is mostly impulsive in nature.⁷ In this study, organophosphorus pesticides were the most common agents used for attempted suicide in both males as well as females. This has been observed in other studies also from various other centers in India.⁸⁻¹⁰ Rodenticides accounted for the second most frequently chosen poison.

This study also reveals that attempted suicide is more common in females, especially those belonging to nuclear

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Table 1 Modes of Attempted Suicide (Bhopal, Madhya Pradesh)

S No.	Mode	Male (n=50)	Female (n=82)	Total (n=132)
Poisoning				
1	Organophosphorus compound	16 (32%)	20 (24.39%)	36 (27.27%)
2	Zinc phosphide	8 (16%)	22 (26.83%)	30 (22.72%)
3	Diazepam	8 (16%)	8 (9.75%)	16 (12.12%)
4	Borax	0 (0%)	14 (17.07%)	14 (10.6%)
5	Aluminium phosphide	4 (8%)	4 (4.87%)	8 (6.06%)
6	Phenol	2 (4%)	6 (7.31%)	8 (6.06%)
7	Benzene hexachloride (BHC)	0 (0%)	2 (2.43%)	2 (1.51%)
8	Carbamate compound	0 (0%)	2 (2.43%)	2 (1.51%)
9	Kerosene	0 (0%)	2 (2.43%)	2 (1.51%)
10	Glyphosate	2 (4%)	0 (0%)	2 (1.51%)
Other Modes				
11	Hanging	4 (8%)	0 (0%)	4 (3.03%)
12	Cut-throat	0 (0%)	2 (2.43%)	2 (1.51%)
13	Unknown	6 (12%)	0 (0%)	6 (4.5%)

families comprising fewer members. Many such victims were frustrated youngsters, or were victims of domestic violence, family strife and the like.

This study has its limitations. The study group comprised survivors of attempted suicide. Consequently it is not necessarily reflective of the real spectrum of chemical and non chemical means deployed in committing suicide, but rather the less lethal modes, where rescue was possible. The study was conducted in hospital medical wards, where many victims of more rapid deaths such as hanging, drowning, self-immolation, etc., do not often reach at all.

Since poisoning appears to be a preferred mode of attempting suicide, it is imperative that certain measures are put in place to minimize their incidence, and to promote better medical management. It is important to impose restrictions on the sale of poisonous substances, especially pesticides, and to make it mandatory for manufacturers to clearly mention, in native language, the ex-

act chemical ingredients, antidotes (if available for the ingredients), and details of primary management of poisoning with that product. Non-compliance should entail banning the product from being sold commercially.

REFERENCES

1. World Health Organization. Suicide and Attempted Suicide in Young People. 1994. Geneva: WHO Headquarters.
2. World Health Organization Reports. Intentional Suicidal Statistics. 2000. Geneva: WHO Headquarters.
3. Ponnudurai R, Jeykar J, Saraswati M. Attempted suicide in Madras. *Indian J Psychiatry* 1998; 28: 59-62.
4. Sharma RC. Attempted suicide in Himachal Pradesh. *Indian J Psychiatry* 1998; 40: 50-54.
5. Narang RL, Mishra BP, Mohan Nitesh. Attempted suicide in Ludiana. *Indian J Psychiatry* 2000; 42(1): 83-87.
6. Badrinarayan A. Suicidal attempts in Gulbarga. *Indian J Psychiatry* 1977; 19: 69-70.
7. Marzuk PM, Leon AC, Tardiff K, Morgan EB, Stajic M, Mann JJ. The effect of access to legal methods of injury on suicide rates. *Arch Gen Psychiatry* 1992; 49: 451-458.

8. Sanjeev Rao, Galgudi RB, Ashok MV, Appay P. Psychiatric diagnosis of self-poisoning cases of general hospital study. Indian J Psychiatry 1978; 40(3): 254-259.
9. Suresh Kumar PN. A descriptive analysis of methods adopted, suicide intent and causes of attempted suicide. Indian J Psychological Med 2000; 23(1): 47-55.
10. Ponnudurai R, Patnaik A, Sathyanathan R, Suban K. A study on venues of suicide. Indian J Psychiatry 1997; 39: 34-36.