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Self Poisoning in Mosul City

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ABSTRACT

Case series study was conducted in Ibn-Sina teaching hospital in Mosul city, a sample of 100 cases aged (14-43) years admitted to the hospital after self poisoning by drugs or chemicals. Eighty four percent (84%) were females. The female/male ratio was 5:1. Ninety percent (90%) of self poisoners were under the age of 31 years, but the commonest age group was 16-20 years (46%). The majority of attempters were from social class five (78%), and 90% of them from urban areas.

Ingestion of a single drug or a chemical was the predominant method, twenty six percent used sedatives or hypnotic's drugs and 16% used non opiate-analgesic.

The most common difficulties preceding the over doses were problems with parents 28%, love affairs 20%, marital problems, bereavement and school problems. Twenty six percent had visited doctors prior to their attempt. Seventy eight percent (78%) was para-suicide and only 22% was real suicide.

Key words: self- poising , overdose, parasuicide.

Introduction

Self-poisoning is defined as intentional self-administration of more than a prescribed dose of any drug, whether or not there is an evidence that act was intended to cause self-harm, self-poisoning includes over doses of drugs for kicks and poisoning by non ingestable substance and gas, provided the hospital staff consider that these are cases of deliberate self-harm, alcohol intoxication is not included unless accompanied by other type of self-poisoning[(1,26)].

Episodes of poisoning were identified using ICD10 for "poisoning by drugs and medicament". These categories include deliberate self-poisoning and over doses of substances taken in error but exclude the adverse effects of corrects of correct substance properly administered [(2,31)].

Most of the Para suicide are due to drug over dose either prescribed or non-prescribed[(3,27)]. Self poisoning is commoner in women than in men and in young adult than in elderly[(3,30,28)]. There is a higher incidence of over dose among the lower economic group, particularly those living in crowded socially deprived urban area[(3,29)]. They often have a deprived family background due to early loss of a parent through death or separation [(4,37)].

There are also link with alcohol abuse, child abuse, unemployment and recent broken relationships[(4,32)].
Thorough psychiatric and social assessment must be carried out in all cases[(5,26)].

In most hospitals this involve an interview by a psychiatrist[(5,25)], this need not always be the case because it is now recognized that Junior, physician, nurse and social worker can assess these patients competently if properly trained and supervised[(5,31)].

The assessment should be under taken after emergency medical treatment has been completed, and it is important that sufficient time should have elapsed to allow the toxic effect of drug to wear off[(6,34)].

Psychiatrist frequently explain self-poisoning as means of punishing and manipulating others[(7,35)]. When presented with case histories, doctors usually attributed over doses either to the wish to die or to manipulate others[(8,32)].

Moreover, the psychiatrist distdistinguished between the two types of over dose, being sympathetic to patients who they thought wished to die and un sympathetic to those whose over dose they regarded as manipulative, nurses presented with same case histories were generally more sympathetic and accepting of the behavior than doctor [8,26]. The most common problem proceeding overdoses are difficulties inin key relationship usually with parents or partner[9,31,25].
It's also clear from clinical experience that people who take over doses often evoke strong feeling in those around them[9,33].

The ways in which self-poisoners explain their own overdoses have been examined in several studies which have produce a similar result [21,37].

At least one third of patients indicated, both spontaneously and when asked directly, that they took over dose because they wanted to die. When given list of other possible reasons for the act, about one half chose those indicating a need to escape from, or to gain relief from difficult situations [23,30].

Although the communicative nature of overdoses has been stressed by some authors, self-poisoner infrequently admit to reason concerning communication of hostility or manipulation of others[11,28].

Aim of the study

1-To identify sample of self-poisoning in Mosul city, in regard, to sociodemographic characteristics type of drug or chemicals, difficulties preceding the overdoses, motivation, contact with medical help prior to the attempt and number of attempts.

2-To compare these findings with published studies in different countries in the world

Method and Material

The sample consisted of 100 cases that were referred to Ibn-Sina teaching hospital from causality unit following deliberate self-poisoning virtually most patients admitted to the hospital after overdoses are referred to psychiatric unit. Each patient was routinely interviewed for clinical psychiatric assessment by using detailed structured questionnaire. The information elicited from each patient include demographic characteristics, the events that preced the overdose, social difficulties, trigger factor, motivation, previous attempts, history of psychiatric or physical illness, contact with medical help prior to the attempt, and nature of the overdose. The nature of drug or chemical was obtained from patients or informants or from reading the labels on the containers.
Cases of an accidental poisoning were not included.

Result

(a) Demographic characteristics:

The highest rate of frequency of self-poisoners 46% S.P (<0.02) occurred in the age group (16-20) years.
26% of them in the age group (21-25) years, and 10% in the age group (26-30) years table (I). Most of the self-poisoners 90% were under the age of 31 years (Figure 1).

The female/male ratio was 5:1, the sex distribution of self-poisoners are shown in table (1).
Most self-poisoner were from social class V (78%)
V.H.S. P(<0.001) as in table (2).

Ninety percent (90%) of attempters were from urban areas and ten percent (10%) from rural areas table (3).
66% of attempters were single VHS. P(<0.001), 20% were married 10% were divorced, and the rest 4% were widow table(4).

(b) Precipitating factor:

Table (5) show the difficulties which precede the overdoses.

There were three categories of problems stood out from the rest, problem with parents (28%), love affair (20%) and marital problems (14%), such as quarrelling with spouses, VHS. P(<0.001).

Although formal psychiatric illness was rare, 10% had psychiatric symptom in the form of depressed mood.

Six percent (6%) of subjects had history of failure in the exam. The proportion with alcohol problems was 2%. Other problem included variety of difficulties like bereavement, problem with sibs, (table 5).

(c) Drugs and chemicals which were used in the attempts:

Of the 100 cases of self-poisoners by drugs and chemicals, there were sedative – hypnotic in 26%, non-opiate analgesic in 16%, organo phosphorus compound in 10%, antidepressant in 8%, carbamizepin in 8%. Most of the cases ingested a single drug, just 10% have used more than one drug. (table 6)

(d) Contact with medical help prior to the attempt:

Twenty-six percent (26%) had visited doctor before the attempt, 16% of them contacted a psychiatrist and 10% contacted a physician.

Twenty-five percent (25%) of patients contacted with medical service in previous week and 50% during the previous month (table 7).

(e) Repetition of self-poisoning:

88% had self-poisoning for the first time. 10% were second attempt and 8% were third attempt. (table 8).

(f) Motivation:

The majority of cases 78% were attempts to seeking help while 22% had a real wish for death.

Table (1): distribution of self-poisoning according to Age & Sex

Age group (years)	Male No. (%)	Female No. (%)	Total No. 100%
10-15	-----	8 (100)	8
16-20	6 (14)	40 (80)	46
21-25	4 (15)	22 (85)	26
26-30	4 (40)	6 (60)	10
31-35	-----	4 (100)	4
36+	2 (34)	4 (66)	6
Total	16	84	100

Table (2): distribution of self poisoning according to social class

Social Class	Male No. (%)	Female No. (%)	Total No. 100%
V	16 (20)	62 (80)	78
IV	-----	20 (100)	20
III	-----	2 (100)	2
Total	16	84	100

Table (3): distribution of self-poisoning according to Residence

Residence	Male No. (%)	Female No. (%)	Total No. 100%
Urban	14 (16)	76 (84)	90
Rural	2 (20)	8 (80)	10
Total	16	84	100

Table (4): distribution of self-poisoning according to Marital Status

Marital Status	Male No. (%)	Female No. (%)	Total No. 100%
Single	6 (10)	60 (90)	66
Married	6 (30)	14 (70)	20
Divorced	2 (20)	8 (80)	10
Widow	2 (50)	2 (50)	4
Total	16	84	100

Table (5): distribution of self-poisoning according to the Nature of the problem

Problem	Male No. (%)	Female No. (%)	Total No. 100%
Parents	-----	28 (100)	28
Love Affair	4 (20)	16 (80)	20
Marital problem	4 (28)	10 (72)	14
Psych symptoms	-----	10 (100)	10
Bereavement		8 (100)	8
Work	6 (100)	-----	6
School		6 (100)	6
Sibling		4 (100)	4
Alcohol intake	2 (100)	-----	2
Other	-----	2 (100)	2
Total	16	84	100

Table (6): distribution of self-poisoning according to type of substance

Drug or chemical	Male No. (%)	Female No. (%)	Total No. 100%
Sedative-hypnotic	4 (15)	22 (85)	26
Analgesic	2 (13)	14 (87)	16
Organo phosphorus compound	-----	10 (100)	10
Antidepressants agents	-----	8 (100)	8
Carbamazepine	4 (50)	4 (50)	8
Propranolol	-----	6 (100)	6
Kerosin	-----	6 (100)	6
Ferous sulphate	-----	6 (100)	6
Antibiotic	2 (50)	2 (50)	4
Mixture of drugs	4 (40)	6 (60)	10
Total	16	84	100

Table (7): Contact with medical service prior to overdose

Age (years)	Physician No. (%)	Psychiatrist No. (%)	Total No. 100%
10-20	8 (80)	2 (20)	10
21-30	2 (17)	10 (83)	12
31-43	-----	4 (100)	4
Total	10	16	26

Table (8): no. of Attempts according to sex

No. of Attempt	Male No. (%)	Female No. (%)	Total No. 100%
1st Attempt	16 (18)	72 (82)	88
2nd Attempt	-----	8 (100)	8
3rd Attempt	-----	4 (100)	4
Total	16	84	100

Discussion

This study was prompted by concern about the deliberate self-poisoning in Mosul city. It is likely that this sample is representative of self-poisoning in Mosul area, since all self-poisoners of Mosul area referred to Ibn-Sina teaching hospital and the sample was almost entirely consecutive.

Female/male ratio (5:1) is similar to that found in other studies Kehoe and Abbott( ) in Canada reported a female/male ratio is 4:1; Kraus[13,35] in Australis 6.1:1. Bancroft et al[14,27] in England 2:1 and O'Berin[15,26], in United State 2:1. Moreover, our study agree with what had been found by Al-Khattab study[22,31] in Mosul female/male ratio 7:1, but in contrast to that of Dabbagh study (1964) female/male ratio 1:4 which could be related to difference in social conditions between the two periods.

In African countries seems to have equal female: male ratio or male involvement, Anumony and Jurek[16,28] in new Guinea reported a ratio of 1:1.3 and Asuni[17,29] in Nigeria reported ratio 1:2.

There seems to be three likely explanations for the excess of female the first that the girls may mature and face problems of adulthood earlier than boys. Secondly, self-poisoning appear to be culturally less acceptable among males who only seems to resort to over dose in the face ver considerable difficulties.

Finally males may have alternative outlets for expressing distress such as indulging in aggressive behavior.

Ninety percent (90%) of self-poisoners in this study were under the age (31) years old; this in agreement with other studies[16, 36] where the rates ranged from (74% - 90%). In the present study as previous studies in Mosul; Khattab[22,37] the age group most at risk was between 16-20 years old (46%), this is in agreement with finding of Eferakeya[19,27], but is in contrast to the finding in most Western countries, where it has between (20-29) years old[12,14,18,25,30].

The commonest events preceding the overdoses, were related to parental problems and this in agreement with the finding of Oxford[20, 32] but in Efrekya[19,26,28], the most risk factors were mental symptoms then the a conflict with parents, educational problems and marital problems .As in Western countries, the drug most commonly employed were sedative – hypnotic agents. In Oxford[20,32] the adolescents took overdose of non-opiate analgesic agents (Paracetamol, Salicylate) more frequently, but psychotropic drugs were used by older age group. As in Khattab study[22,34], sedatives and hypnotics were the most common drugs used.

Contact with medical service or helping agencies prior to the attempt was more in developed countries and this explain the difference in cultural and educational level between the developed and developing countries[20, 23] were in Oxford 75% of patients consult the doctors prior to the attempts, but in our study just 26% contact with the medical service prior to the attempt.

Conclusion

Self-poisoning is one of the most common problems encountered by psychiatrists who work in general Hospitals, in spite of that very few studies have been carried out over the last 30 years in a big city like Mosul.

In our study we tackle the sociodemographic characteristics, type of drug or substance used, difficult is preceding the overdose; motivation and contact with a medical staff prior to attempts, and number of attempts. We compared our findings with studies done elsewhere. The result of this study might be beneficial for more comprehensive research work in the future time.

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