

Medicolegal Aspects of Suicidal Attempts by Drugs in Cases admitted to Poison Control Center of Ain Shams University Hospitals (2019-2020)

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Abstract

Background: A suicide attempt is an act by which the person wants to end his own life, but mostly it is non-fatal. In Egypt people struggle in many aspects of life urging them to desperation and suicidal attempts. **Aim of the study:** To assess the medicolegal aspects of suicidal attempts through analysis of socio-demographical data, risk factors, common drugs used and outcome. **Methods:** a cross-sectional study was conducted in the Poison Control Center of Ain Shams University hospitals, Egypt from the first of September 2019 till the end of February 2020. Data were collected from through direct interviewing of patients. **Results:** The total number of patients in the study were 580 patients aged from 6 to more than 45 years old. Most of the attempters were females (77.24%), aged 19 to 44 years (62.59%), singles (69.31%), students (51.55%), had university educational level (42.59%), living in urban areas (70.69%) and had low-income status (62.07%). About (86.55%) of them had no history of previous attempts with psychiatric problems as the most common cause (55.18%). Patients who used mixed poisons had the highest prevalence (27.24%). (43.28%) of cases were admitted to the ICU of whom (56.57%) were notified to the police station. (74.31%) of cases completely recovered while (24.14%) refused treatment. **Conclusion:** Suicide attempts by drugs is a serious medical health problem especially among young adults and single females. Psychiatric and family problems are the most common causes.

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Key words

medicolegal, suicidal attempts, drugs, Ain Shams University

Introduction

Suicide is one of the top twenty causes leading to death in the world, exceeding mortality due to malaria, breast cancer, wars, or even homicides (World Health Organization, 2019).

A suicide attempt (parasuicide) is a serious medical health problem (Johannessen et al., 2011). A suicide attempt is defined as a nonfatal self-directed potentially injurious behavior with any intent to die as a result of the behavior. It may or may not result in injury (O'Connor et al., 2013). Globally, it is up to 20 times more common than completed suicides (Befrienders, 2018; Schreiber and Culpepper, 2020).

The methods of suicide vary between countries. They can be categorized into two large categories: physical methods (hanging, burning, drowning, jumping from a height, railway injuries, motor vehicle injuries, stabbing and cutting, firearms injuries, suffocation, electrocution) and chemical methods (poisoning by drugs, insecticides, and toxic gases). 'Determined death seekers' or suicide attempters are known for resorting to any available means to terminate their own lives (Mohanram & Mohanty, 2006).

Globally, there are many risk factors that contribute to suicide attempts such as psychiatric disorders, alcohol

abuse, drug addiction, socioeconomic problems, low educational level, and unemployment (Bachmann, 2018).

Suicidal attempts are one form of presentation to emergency departments (ED) in healthcare centers across the Arab countries in the Middle East North Africa (MENA) region (Halabi et al., 2020).

The rates of suicidal attempts in the Arab hospitals ranged from 1.9/100,000 to 127/100,000 annually (Karam et al., 2008). Because of a lack of awareness of psychiatric diseases, lack of mental health services, and stigmatization of psychiatric cases, suicidal attempt patients are not usually presented to health care facilities (Halabi et al., 2020).

The pattern of suicide in a region depends upon a variety of factors, including availability and access to the method, socio-economic status of the individual and also the prevailing cultural and religious influences (Mohanram & Mohanty, 2006). Suicidal attempts in Egypt is a major problem that needs to be studied in details throwing light on its pattern and medicolegal aspects.

In 2011, the annual report of the poison control center of Ain Shams University hospitals (PCC-ASUH) showed that 49% of cases were attempted suicide in comparison with accidental (42.7%) poisoning exposure (El-Masry & Tawfik, 2013). While in 2015, the PCC-

ASUH annual report showed that suicidal attempts increased to 43.9% with prominent risk factors such as financial, emotional, and social stresses (Tawfik & Khalifa, 2017).

Aim of the Work

To assess the medicolegal aspects of suicidal attempts by socio-demographical data, risk factors, most common drugs that are used, and the outcome of suicidal attempters by drugs

Patients and Methods

This was a cross-sectional observational study implemented at PCC-ASUH, Cairo, Egypt. It included all cases of suicidal attempts by drugs that were admitted during a six-month period from 1/9/2019 to 29/2/2020.

A medical sheet for the collection of data was tailored to fit the purpose of the study after revising the daily used sheet of PCC. This was done through direct interviewing with patients.

Data collected included:

1. *Sociodemographic data:* age gender, residency, marital status, educational level, socioeconomic status, and occupation

To demonstrate socioeconomic status, patients were classified using the World Bank Atlas method (WB, 2019; Hamadeh et al., 2021) into four groups:

- Low-income economies \$1,045 or less (\approx 16,420 Egyptian Pound or less)
- Lower middle-income economies between \$1,046 and \$4,095 (\approx 16,435 and 64,344 Egyptian Pound).
- Upper middle-income economies between \$4,096 and \$12,695; (\approx 64,359 and 199,473 Egyptian Pound).
- High-income economies are \$12,696 or more (199,488 Egyptian Pound or more).

2. *History:*

- Past history of special habits, psychiatric illness, chronic disease, previous attempts, and its causes
- History of present illness: poisoning details (name of drug, category, amount, route of administration, delay time) and location of poisoning.

3. *Outcome:* This includes the site of admission and fate of the patients whether complete recovery, discharged against medical advice or death.

4. *Psychiatric consultations and police notification of suicidal attempters*

The obtained results were recorded, tabulated, and statistically analyzed by excel system then Statistical Package for Social Sciences version 20 software (SPSS) to show the relations between variables.

The current study included measures of frequency (frequency and percentage), central tendency (mean and standard deviation), dispersion (range), and Chi-square (X^2) test.

Ethical considerations:

The study was carried out after obtaining the ethical approval of the Faculty of Medicine Ain Shams University Research Ethics Committee (FMASU REC), as well as the approval of the director of PCC-ASUH.

Confidentiality of data was maintained through the anonymous collection of data from electronic databases and medical records of PCC-ASUH. Written informed consent was obtained from patients or guardians of patients who were invited to participate in the research.

Results

During the study period, a total of 580 patients were admitted to the PCC-ASUH with suicidal attempts using drugs representing 29.44% of the total number of admitted patients during the fore mentioned period (1970 patients).

Regarding the sociodemographic data (Tables 1). This study showed that most of attempters were females (77.24%), aged from 19 to 44 years (62.59%), living in urban areas (70.69%), singles (69.31%), with low-income (62.07%), students (51.55%), had university level (42.59%), with no history of special habits (87.76%), and no history of psychiatric diseases (90.52%).

The major causes of suicidal attempts were psychiatric and family problems (55.18% and 32.59% respectively) (Table 1).

There was a significant difference regarding psychiatric problems and gender (Table 2). The majority of patients (86.55%) have no history of prior attempts. The houses of patients were the most common place for drug poisoning (98.79%) and the oral route was the most common route of administration (97.76%).

The delay time ranged from 0.5 to 72 hours with means of (6.334 ± 6.802 SD) hours and median (4). Most cases came to the center more than 6 hours to 24 hours after drug intake (30.69%).

As regards the outcome of patients; about (56.72%) of cases admitted to inpatient ward, (43.28%) of cases admitted to ICU (table 4). And (74.31%) of cases had complete recovery, (24.14%) refused treatment (discharged against medical advice), 1.21% of cases referred to another center, (0.34%) of cases died in ICU one case ingested cardiovascular drug and other one took in unknown medications.

Psychiatric consultation was done to one patient only who was a known depression patient. He tried to commit suicide by ingestion of mixtures of drugs. Nearly (56.57%) of all cases admitted to ICU were notified to the police station. It was done in comatose cases, suicide with antipsychotics or antidepressants in addition to those who were mechanically ventilated. Notifications were mostly noted in patients who ingested CNS drugs (65.49%) followed by those who used mixed poisons (26.76%) (Table 5).

Table (1): Number and percentage of patients with suicidal attempts according to sociodemographic data, presence of special habits, presence of psychiatric illness and causes of suicidal attempts

		N	%
Age group	6-12 years	18	3.10
	>12-18 years	170	29.31
	>18-44 years	363	62.59
	≥44 years	29	5
Gender	Females	448	77.24
	Males	132	22.76
Place of residence	Urban	410	70.69
	Rural	170	29.31
Marital status	Single	402	69.31
	Married	155	26.72
	Divorced	14	2.41
	Widow	9	1.55
Educational levels	Illiterate	21	3.62
	Primary school level	40	6.90
	Preparatory school level	94	16.21
	Secondary school level	123	21.21
	University level	247	42.59
	Institute graduate	55	9.48
Socioeconomic status	Low income	360	62.07
	Lower middle income	219	37.76
	Upper middle income	1	0.17
Occupation	Student	299	51.55
	Unemployed	139	23.97
	Self-employed	74	12.76
	Professional	44	7.59
	Laborer	24	4.14
Special habits	No	509	87.7
	Yes	71	12.24
Psychiatric illness	No	525	90.52
	Yes	55	9.48
Causes of suicidal attempts	Psychiatric problems	320	55.18
	Family problems	189	32.59
	Study problems	26	4.48
	Work problems	16	2.76
	Patients who refuse to mention cause	7	1.20
	Unknown cause	20	3.45
	Others	2	0.34
	Total	580	100

Table (2): Chi-Square statistical analysis of patients with suicidal attempts showing the relationship between psychiatric problems as a cause of suicidal attempts and gender.

Psychiatric problems as a cause of suicidal attempts	Sex						Chi-Square	
	Male		Female		Total		X ²	P-value
	N	%	N	%	N	%		
No	39	15.00	221	85.00	260	100	16.137	<0.001*
Yes	93	29.06	227	70.94	320	100		
Total	132	22.76	448	100	580	100		

X²: Chi-Square test *P value <0.05

Table (3): Number and percentage of patients with suicidal attempts according to the subtype of the drug used

	Subtype of the drug used	N	% in relation to all cases	% in relation to each group
CNS drugs	Antipsychotics	77	13.28	53.85
	Anticonvulsants	40	6.90	27.97
	Antidepressants	23	3.97	16.08
	Narcotic analgesics	1	0.17	0.70
	Anti-Parkinson drugs	1	0.17	0.70
	Anti-hyperactivity drugs	1	0.17	0.70
	Total	143		100
Chest preparations	Theophylline	140	24.14	97.22
	Antihistamine drugs	2	0.34	1.39
	Common cold agents	2	0.34	1.39
	Total	144		100
CVS drugs	B Blockers	18	3.10	52.94
	Digoxin	8	1.38	23.53
	Ca channel blockers	6	1.03	17.65
	Anticoagulant drugs	2	0.34	5.88
	Total	34		100
Musculoskeletal drugs	Skeletal muscle relaxants	4	0.69	57.14
	Anti-gout agents	3	0.52	42.86
	Total	7		100
Endocrine drugs	Oral hypoglycemic drugs	41	7.07	91.11
	Injectable hypoglycemic drugs	4	0.69	8.89
	Total	45		100
Analgesics	Paracetamol	28	4.83	82.35
	Salicylates	6	1.03	17.65
	Total	34		100
Mixed poisons	Drugs or drugs and chemicals	158	27.24	100
Unknown drugs	Unknown drugs and chemicals	15	2.59	100
Total		580	100	100

Table (4): Number and percentage of patients with suicidal attempts according to site of admission and outcome distribution

		N	%
Site of admission	Inpatient	329	56.72
	ICU	251	43.28
	Total	580	100
Outcome distribution	Complete recovery	431	74.31
	Discharged against medical advice	140	24.14
	Referred to another center	7	1.21
	Mortality	2	0.34
	Total	580	100

Table (5): Number and percentage of some patients with suicidal attempts in relation to police notifications

Patient groups	N	%
(CNS) drugs	93	65.49
(CVS) drugs	1	0.70
Musculoskeletal drugs	2	1.41
Endocrine drugs	1	0.70
Mixed poisons	38	26.76
Unknown drugs	7	4.94
Total	142	100

Discussion

Approximately one-third of the total number of patients, admitted to the PCC-ASUH, Cairo, Egypt during the study period from 1/9/2019 until 29/2/2020 used drugs in attempted suicide (29.44%). This might be due to drugs being readily available, inexpensive, and easier to use than other poisoning methods especially over-the-counter drugs. This finding emphasizes the importance of locking up drugs prescribed to any family member if they can be lethal in overdose (Miller et al., 2020).

This coincides with a study done in Lebanon, where overdose of prescription and over-the-counter drugs were the most common methods of suicidal attempt (61.3% and 27.9% respectively) (El-Majzoub et al., 2018). Also, a study made in Menoufia PCC, showed that drug overdose represented around 28.1% of studied cases (El-Farouny & Helmy, 2021).

Suicidal attempts were more common in females (77.24%), possibly because the nature of females is to prefer non-violent methods of suicide. Furthermore, women may use less lethal methods for attention seeking with no intention to die (Tsirigotis et al., 2011). This agrees with the results of a study made in PCC of Ain Shams University Hospitals between 2015 to 2016 where females represented about 70% in both years (Salah Eldin & Azim, 2018).

Regarding the age of the groups under study, the group between 19 to 44 years old showed the highest prevalence (65.59%) followed by the group between 13 to 18 years (29.31%). It might be due to socioeconomic factors that produce various obstacles, quick lifestyle changes, and evident difference in thoughts between the younger and older generations. It was noted that cyberbullying and peer victimization are clear triggers for suicidal ideation and attempts in adolescents (van Geel et al., 2014)

This result was substantially identical to a study conducted in the PCC of Ain Shams University Hospitals in 2015 and 2016, in which the age range between 19 to 30 years old was roughly 50% (Salah Eldin & Azim, 2018). However, it contradicted a study conducted in Menoufia PCC, which found that the age group between 10-20 years old had the highest prevalence (38.4%) (El-Farouny & Helmy, 2021).

The majority of the patients in the current study were from urban areas (70.69%). This could be because the majority of admitted patients live in Cairo, where

they have a more stressful lifestyle. Increased risk in urban areas can largely be explained by the effects of marital status, ethnics, income, and psychiatric status (Qin, 2005) This result relatively matched a study in Palestine, which revealed that 50.6% of patients were from cities (Khatib, 2019). However, it disagreed with Menoufia's study, which showed that most patients were from rural areas (78.7%) (El-Farouny & Helmy, 2021).

Single patients showed a higher prevalence than other statuses, such as married people (69.31%). It is likely because the loss of integration and social support for single people. Being unmarried, living alone, social isolation together with the lack of close personal bonds are some of the main predictors of suicidal behavior (Øien-Ødegaard et al., 2021). This result is similar to a study conducted in Palestine, which showed that the majority of patients were single (56.6%) (Khatib, 2019). Likewise, in a study conducted in Menoufia PCC, (59.2 %) of patients were also single (El-Farouny & Helmy, 2021).

Most patients had a low-income, followed by lower-middle-income individuals (62.07% and 37.76 % respectively). This might be due to financial hardships and poverty, which result in a stressful living.

This result is parallel to a study carried out in Palestine, which showed most patients had middle income followed by lower income (68.7% and 22.9% respectively) (Khatib, 2019). However, it differed from a study made in northwest Ethiopia in which low-income individuals were (31.3%) (Belete et al., 2021).

Regarding the occupation and educational level, most patients were students (51.55%) and were college students (42.59%). This may occur because of educational stress and difficulties as being in the first year of college. Other factors included poor social support and familial history of previous suicidal attempt (Abdu et al., 2020).

This result contradicts a study made in Istanbul that showed that employees had the highest prevalence (36%) and had a primary education level (52.6%) (Karatoprak et al., 2015). Nevertheless, the result is parallel with a study in Menoufia PCC, which showed that most patients were students (34.9%) (El-Farouny & Helmy, 2021).

In the current study, most patients had no history of special habits (87.76%) whereas (12.24%) had a history of smoking, drinking, and drug misuse.

The explanation for this might be that the majority of attempters were females, who in our Arabic community had few special habits.

This result was comparable to a study made in Lebanon which showed that (19.9%) of the presented had a history of special habits (alcohol and illicit drug abuse) (El-Majzoub et al., 2018). Similarly, a study made in Korea showed that smoking was associated with suicide attempts for both genders, while frequent drinking was associated with suicide for females (Kim et al., 2016).

About 90.52 % of suicidal attempters had no history of psychiatric illness and depression was the most common disease in patients with a history of psychiatric illness (56.4%). Interestingly genetic background might explain such a phenomenon; the serotonergic transmission plays a pivotal role in individual differences in mood, impulsiveness and aggression. Molecular genetic studies identified two genes, one coding for the tryptophan hydroxylase 1 (TPH1 A218C) and the other for the serotonin transporter (5-HTTLPR), both were involved in the vulnerability for suicidal behaviour (Bondy et al., 2006)

This result was relatively correspondent to a study in Korea, which showed that the prevalence of no history of psychiatric illness was high (50.3%) (Lim & Lee, 2018). Further, it agreed with a study conducted in Palestine, which showed the majority of patients had no history of psychiatric illness (57.8%) and depression was the most common disease (68.57%) (Khatib, 2019).

In the current study, psychiatric problems were the most prevalent cause for the attempts (55.18%), followed by familial difficulties (32.59%). Both of these factors were more prevalent in females (70.94%, 91.01% respectively). Examples of psychiatric troubles as stated by patients were loss of a loved one or a job, breakup of a marriage, school and social failure. This could be related to the individuals' personalities in response to stress, who may be angry, impulsive, aggressive, worried, and sad in certain conditions and eventually opted to die. This result matched the results of a study in Palestine which showed that the majority of patients had psychiatric problems (42.2 %) followed by family problems (34.9%) (Khatib, 2019).

Nonetheless, another study in Menoufia PCC result disagreed with the current study. It showed that the majority of patients had family problems (30.6%) followed by economic and financial problems (25.4%). Regarding the relationship between gender and cause of suicidal attempts; (27.9%) of males attempted suicide for economic and financial reasons, while 33.1% of females attempted suicide due to family problems (El-Farouny & Helmy, 2021).

The majority of patients (86.55%) had no history of prior attempts, yet there was a significant difference concerning psychiatric diseases. This might imply that people who have previously attempted suicide have a high level of suicidal intent as well as indications of psychiatric disease.

This result is similar to a study made in Denmark in adolescents. It showed that 32% of suicidal patients had a history of previous suicide attempts (Hedeland et al., 2016). Moreover, it matched the findings of a study in Palestine, which showed that the majority of patients had no history of previous attempts with a percentage of (92.8 %) (Khatib, 2019).

Homes were the most common place of occurrence for drug poisoning (98.79%) and the oral route was the most noted route of administration (97.76%). This is because the drugs are more available in such places. Also, the current study was carried out at the beginning of Covid-19 pandemic in Egypt. All the pandemic problems, such as positive infection diagnosis, isolation, quarantine, social distancing, the economic consequences, can trigger behavioural changes such as sadness, anxiety, fear, anger, annoyance, frustration, guilt, helplessness, loneliness, and nervousness, increasing the risk of the suicidal behaviour, and the committed suicide at homes (Crisan et al., 2021).

This result is parallel to a study in Lebanon in which most attempts occurred at home (93.5%) (El-Majzoub et al., 2018) as well as 98.33% of patients in a study made in PCC in Jordan (Yehya et al., 2020).

Regarding the prevalence of drugs, the mixed poisons (group VII) showed the highest prevalence among patients in the current study (27.24%) followed by chest preparations (group II) (24.83%), CNS drugs (group I) (24.66%), endocrine drugs (group V) (7.76%). The CVS drugs (group III) and analgesics (group VI) had the same prevalence (5.86%), while unknown drugs (group VIII) (2.59%) and the musculoskeletal drugs (group IV) showed the least prevalence (1.21%). This could be a result of non-planned suicidal attempts. It should be noted that oral ingestion of single or multiple medications is a clear sign of suicidal (Mohanram & Mohanty, 2006). However, the analgesics were the most common group in a study made in Jordan (28%) (Yehya et al., 2020) and CNS drugs had the highest prevalence (9%) in a study made in Menoufia PCC (El-Farouny & Helmy, 2021).

The delay time ranged from 0.5 to 72 hours with means of (6.334±6.802 SD) hours and median (4). The majority of cases came to the center more than 6 hours to 24 hours after drug intake (30.69%). This could be the result of the severity of symptoms caused by drugs appearing more after 6 hours, sometimes the patients cannot tolerate the progressive symptoms, or their families rush to the center to save them.

This result was dissimilar to a study in PCC in 2003, which showed that the majority of cases came with delay time ≤ 3 hours (74.7 %). (Hafiz et al., 2005). Likewise, it contradicts a study in Palestine, which showed that delay time was 2 hours or less (74.7 %) (Khatib, 2019).

Regarding admission and outcome, our study showed that most cases (74.31%) were admitted to the inpatient ward and 24.14% were admitted to ICU. The outcome of studied patients showed that nearly (74.31%)

of individuals totally recovered, (24.14%) refused treatment and were discharged after (AMA) and 0.34% of individuals passed away. The reason behind this is that the symptoms were not life threatening or some attempts were merely done to obtain their family compassion. Furthermore, the possible causes of (AMA) were financial issues, social believes, non-accessibility to health insurance services and lack of trust in the medical system (Oyinlola et al., 2020).

This result is similar to a study made in Lebanon which showed that (70.3%) of patients were admitted to the hospital, (23.7%) to the ICU, and (5.3%) to the general medical ward (El-Majzoub et al., 2018). Correspondingly, a study conducted in Istanbul showed that (95.2%) of patients admitted to the ED and (4.8%) of them were admitted to intensive care (Karatoprak et al., 2015)

Regarding the outcome, the results matched a study conducted in Lebanon. In which, (63%) of cases had a complete recovery, 10.3% refused treatment with an additional 13.2% leaving AMA but at the request of the patient (El Majzoub et al., 2018). Moreover, a study in Menoufia's PCC was similar to our results which showed the majority of patients recovered completely (76.6%) (El-Farouny & Helmy, 2021).

In the current study, one case who suffered depression was referred to psychiatry. The possible causes were that most of the cases were mild, others with psychiatric diseases were already on treatment and the majority of suicidal attempts were not successful.

However, in a study in Istanbul, all patients were called for psychiatric assessment (Karatoprak et al., 2015) and in Lebanon, (71.1%) were referred to the psychiatric ward (El-Majzoub et al., 2018). This can be explained by the fact that in suicide survivors, it is important to prioritize treatment of complicated grief by improving the ability to cope with grief-inducing incidents, correcting cognitive distortions, and reinforcing the positivity of life via supportive rehabilitation in the patient's surrounding environment (Kim et al., 2020).

More than half of ICU cases were notified to police as regards their medical conditions (56.57%). This shows that, in Egypt, doctors are oriented with the importance of police notification especially in case of severe suicidal cases (ICU admitted and deaths) and the purpose of police notification was to exclude criminal acts especially the fact that self-harm might result from domestic violence, physical or sexual abuse, blackmail or even cyberbullying (El-Mahdy, 2010).

Usually, police enforcement is required if a patient is angry, asks to leave, or threatens medical workers. The patient should not be permitted to leave the hospital until his condition is thoroughly evaluated (Carrigan & Lynch, 2003).

Conclusion

Suicide attempts by drugs are a serious medical health problem that can affect the whole society. It is more common due to drugs being readily available

(over the counter), inexpensive, and easier to use than other poisoning methods. The risk factors of attempts: female gender, aged (19-44) years old, living in urban areas, with low-income, student, at university level. The most common causes of attempts were psychiatric and family problems due to stressful lifestyles. Most attempts were by oral ingestion of mixed poisons.

Recommendations

Primary and secondary prevention of suicide attempts should be directed to the whole community. The primary prevention includes raising awareness through programs in different media, trained volunteers for counselling and religious awareness regarding the prohibition of suicide. Secondary preventions should be done for attempters in a health care facility by psychiatric management and consultations, social support, familial connections and making proper statistics for suicide to eradicate it.

Confirming the importance of psychiatric referral for cases of suicidal attempts to help them cope with their desire to end their own life and to properly manage their stresses.

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الجوانب الطبية الشرعية لمحاولات الانتحار بالأدوية في الحالات التي تم حجزها بمركز علاج التسمم بمستشفيات جامعة عين شمس

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الملخص العربي

المقدمة: محاولة الانتحار هي فعل يريد الشخص من خلاله إنهاء حياته، لكنها في الغالب غير قاتلة. يكافح الناس في مصر في كثير من نواحي الحياة مما يدفعهم الى اليأس ومحاولات الانتحار.

المهدف من الدراسة: تقييم الجوانب الطبية القانونية لمحاولات الانتحار من خلال تحليل البيانات الاجتماعية والديموغرافية وعوامل الخطر والأدوية الشائعة المستخدمة والنتائج.

طريقة البحث: أجريت دراسة مقطعية في مركز علاج التسمم بمستشفيات جامعة عين شمس، في مصر، في الفترة من الأول من سبتمبر ٢٠١٩ حتى نهاية فبراير ٢٠٢٠. تم جمع البيانات من خلال المقابلات المباشرة مع المرضى.

النتائج: بلغ العدد الإجمالي للمرضى في الدراسة ٥٨٠ مريضاً تتراوح أعمارهم من ٦ إلى أكثر من ٤٥ سنة. كان معظم المحاولين من الإناث (٧٧,٢٤٪)، الذين تتراوح أعمارهم بين ١٩ و ٤٤ عامًا (٦٢,٥٩٪)، العزاب (٦٩,٣١٪)، الطلاب (٥١,٥٥٪)، الحاصلين على تعليم جامعي (٤٢,٥٩٪)، و يعيشون في المناطق الحضرية (٧٠,٦٩٪) وكانوا من ذوي الدخل المنخفض (٦٢,٠٧٪). حوالي (٨٦,٥٥٪) منهم ليس لديهم أي محاولات سابقة لمشاكل نفسية كأكثر الأسباب شيوعاً (٥٥,١٨٪). كان المرضى الذين استخدموا السموم المختلطة أعلى نسبة انتشاراً (٢٧,٢٤٪). حوالي (٤٣,٢٨٪) من الحالات تم دخولها الى وحدة العناية المركزة، منها (٥٦,٥٧٪) تم إخطارها لمركز الشرطة. (٧٤,٣١٪) من الحالات تماثلوا للشفاء التام بينما (٢٤,١٤٪) رفضوا العلاج.

الخلاصة: محاولات الانتحار عن طريق الأدوية مشكلة صحية خطيرة خاصة بين الشباب والنساء غير المتزوجات. المشاكل النفسية والعائلية هي أكثر الأسباب شيوعاً.

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