

Epidemiological Data of Drug Abuse in Kirkuk Governorate; A Descriptive Study

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Abstract:

Background: Drug abuse is the self-administration of any drug in a manner that diverts from approved medical or social patterns within a given culture. Legal or licit drugs and substances are socially accepted and their use does not constitute any criminal offence.

Objective: To determine types of drugs which are abused, to demonstrate the socio-demographic profile of the abusers, the sources of starting drugs consumption and the associated psychiatric disorders among them.

Patients and Methods: A descriptive study of (372) patients with drug abuse consisting of (285) males and (87) females. The study was done in Kirkuk city between December 2012 and January 2014. Diagnosis of drug abuse was made according to the Diagnostic Statistical Manual of diseases-Fourth Text Revised (DSM-IVTR).

Results: The majority of the patients were singles (56.4%), (83.6%) with the age range of (17-38) years, (64%) were illiterate and primary school educate, (72%) were unemployed, (70%) from urban area. (17%), (16%), (13%), of the patients abused, Tramadol, poly drugs, and Alprazolam respectively. (18%) of the patients were diagnosed anxiety disorders, and (3.7%) of the patients were diagnosed with somatoform.

Conclusions: Drug abuse is a growing problem in Iraq. Unaware of medical professional of some drugs with potential risks of abuse, unsupervised prescription and easy access of these drugs, in addition to the characteristic groups of high risks of abuse, such as young males, poorly educated, unemployed, those who were exposed to stressful factors and psychiatric patients. All these need to be addressed by medical, legal and social authorities.

Key words: Epidemiological, Drugs, Abuse, Kirkuk.

Introduction:

Drugs are substances which when introduced into the body will alter the normal biological and psychological functioning of the body, especially the central nervous system⁽¹⁾. UNICEF and the World Health Organization (2006) define drug abuse as the self-administration of any drug in a manner that diverts from approved medical or social patterns within a given culture. Legal or licit drugs and substances are socially accepted and their use does not constitute any criminal offence⁽²⁾. According to a United Nation Office on Drugs and Crime (UNODC) report

(2005), some 200 million people, or 5 percent of the world's population aged 15-64 years have used drugs at least once in the last 12 months, 15 million more than the previous year's estimate. For most of Europe and Asia, opiates accounted for (62%) of all drug treatment sought in 2003⁽¹⁾. Drug dependence has shown a rising trend all over the world, possibly as result of newer and greater stresses related to rapid changes in life styles. This problem has received some attention in recent years among general public and mental health professionals⁽³⁾.

Substance Use Disorders (SUD) are considered to be prevalent in emergency services. Approximately 374000 patients aged over 12 years were admitted to the emergency services due SUD in the United States in 2008, which represents (8.5%) of all SUD related interventions in that country in that year⁽⁴⁾. Traditionally, the profile of the user visiting the emergency department is a male under the age of 30 years, with poly-consumption of other drugs of abuse, who increases this use significantly at the weekends and nighttime⁽⁴⁾. Study at Tihar Jail in India (2001), that enrolled 6800 male drug abusers, found that the commonest age group was 21-25 years; 50% were illiterates; (44%) were unmarried; (8%) were unemployed⁽⁵⁾. Sau et al. (2013) found that (10.2%) of drug abusers were illiterates; (40.8%) were unmarried; (10.9%) were unemployed; (34.15%) of the cases had unsatisfactory income⁽⁶⁾. Amer et al. (2014) found among patients with substance abuse, Tramadol (1.8%), poly-substance (1.7%), anticholinergic (0.5%), and volatile substances (0.3%), preponderance of abuse among single, younger males, who had lower education and unsatisfactory income, where dependence was predominantly among single, younger, unemployed male who had unsatisfactory income. The psychiatric disorder in abuser and dependence groups, were generalized anxiety disorder, somatoform and mood disorders (60.7%, 13.1%, and 13.1%) sequentially whereas he mood disorders and schizophrenia (25% each) were more encountered in the dependence group⁽⁷⁾. A survey conducted in 2009 found that drug abuse prevalence was (7.02%). Commonly used drugs across the country are sedative hypnotics and benzhexol⁽⁸⁾. The aim of the study is to detect types of the drugs which are

abused by the abuser, define the socio-demographic features of the them , recognize the cause of starting drugs consumption and classify the psychiatric disorders among them.

Patients and Methods:

A descriptive study consisted of (372) drug abuse patients including (285) males and (87) females who were attending the private clinic and the psychiatric unit at Azadi Teaching Hospital, between December 2012 and January 2014. Ages of the patients were between (17-60) years. Diagnosis was made according to the Diagnostic Statistical Manual of diseases-Fourth Text Revised (DSM-IVTR)⁽⁹⁾. Patients who met the criteria of substance abuse were included in this study. These criteria are: A pattern of substance use leading to significant impairment or distress, as manifested by one or more of the following during in the past 12 month period:

1. Failure to fulfill major role obligations at work, school, home such as repeated absences or poor work performance related to substance use; substance-related absences, suspensions, or expulsions from school and neglect of children or household
2. Frequent use of substances in situation in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use).
3. Frequent legal problems (e.g. arrests, disorderly conduct) for substance abuse.
4. Continued use despite having persistent or recurrent social or interpersonal problems (e.g., arguments with spouse about consequences of intoxication, physical fights)⁽⁹⁾.

A specifically designed data sheet was developed. Data sheet are include sex, age, marital status, education level, residence, name of the drugs which are abused, first source of the drug taken, and mental state examination. Diagnosis of any comorbid psychiatric disorders were done according to DSMIV-TR⁽⁹⁾. Patients who were diagnosed drug abusers were interviewed with this sheet after they gave verbal consent to participate in this study. Descriptive statistical analysis was done by, mean \pm standard deviation (SD), frequency and percentage.

Results:

A total of (372) patients were interviewed of them 185 (76.6%) were males and 87 (23.4%) were females. The mean age of the patients is 29.27 years (SD=8.36). The socio-demographic characteristics of the patients with drug abuse are shown in (Table 1). The majority of the patients were single 210 (56.4%), 311 of them were (83.6%) between the age of 17-38 years, 238 (64%) were illiterate and primary school graduate, 268 (72%) were unemployed, 261 (70%) were from urban area.

Table 2 shows the frequency of abused drugs. 65 (17%), 60 (16%), 50 (13%) 42

(11%), 35 (9%), of the patients abused Tramadol, poly drugs, Alprazolam, Benhexol, and cyproheptidine respectively, while 3 (0.8%) of the patients abused DF118.

Table (3) shows the source of drug consumption; 130 (34.9%) of the patients abused drugs by learning and pressures of friends, 113 (30.4%), 75 (20.2%), 30 (8.1%) and 24 (6.5%) were iatrogenic abuse by prescriptions from physicians and general practitioners, nurses, pharmacists (by hand) and psychiatrists respectively.

Table 4 shows the frequency of psychiatric disorders among abusers. 45% of the patients were diagnosed with comorbid psychiatric disorders. 67 (18%) of the patients were diagnosed with anxiety disorders including, 29 (7.8%), 25 (6.7%) and 13 (3.5%), with generalized anxiety disorder, posttraumatic stress disorder and phobic disorder correspondingly. 47 (12.6%), 22 (5.9%), 15 (3.9%), 14 (3.7%) of the patient were diagnosed with somatoform disorders, personality disorders, unipolar depression (including dysthymia and major depression) and schizophrenia, sequentially.

Table (1) : Socio-demographic data of patients.

Variables		No.	%
Sex	Male	285	76.6
	Female	87	23.4
Marital state	Single	210	56.4
	Married	100	26.9
	Divorced	37	9.9
	Widowed	25	6.7
Age(years)	17-27	186	50
	28-38	132	35.5
	39-49	48	12.9
	50-60	6	1.6
Education level	Illiterate and primary schools	238	64
	Intermediate and secondary schools	102	27
	University	32	9
Employment	Employed	104	28
	Unemployed	268	72
Residence	Urban	261	70
	Rural	111	30

Table (2): Types of abused drugs.

Types of Drugs	Frequency	%
Tramadol	65	17
Poly drugs	60	16
Alprazolam	50	13
Benzhexol	42	11
Cyproheptidine	35	9
Relief (paracetamol +codeine)	30	8
Clonazepam	28	7.5
Diazepam	16	4
Pulmonary codeine (antitussive)	16	4
Somadril (Carisoprodol)	10	2.6
Chlorpheniramine	9	2
Lorazepam	8	2
DF118(Dihydrocodein)	3	0.8
Total	372	100%

Table (3): First sources of drugs consumption.

1 st sources of starting drug consumption	Frequency	%	
Learning and pressures Friends	130	34.9	
Physicians and general practitioners	113	30.4	
Nurses	75	20.2	
Pharmacy	30	8.1	
Psychiatrist	24	6.5	
Total= 372	Prescribed sources	242	65.1
	Friends	130	34.9

Table (4): Frequency of psychiatric disorders among abusers.

Psychiatric disorders	Frequency	%
Somatoform disorders	47	12.6
Generalized anxiety disorders	29	7.8
Posttraumatic stress disorder	25	6.7
Personality disorders	22	5.9
Schizophrenia	14	3.7
Phobic disorders	13	3.5
Dysthymia	11	2.9
Major depression	4	1
Epilepsy	3	0.8
Total	168	45

Discussion:

The increasing incidence of drug abuse in Iraq is related to many factors, some of these may be due to the increased causes of post-traumatic stress disorders such as recurrent wars, terrorism, immigration and displacement, political and high level of violence^(10,11,12,13). Other causes are related to poverty, unemployment, low education level, insecurity, poor control of drug sale due to open borders, street vendors and obtaining without prescription⁽¹⁴⁾.

Most of the patients in the present study were males (76.6%), which is similar to other studies done north India^(15, 16), and Sao Paulo in Brazil⁽¹⁷⁾. Most of the patients were single (56.4%) and unemployed (72%), this finding is similar to what was shown in a study done in Saudi Arabia⁽¹⁸⁾. Many of the drug abusers were either illiterate or just achieved primary school certificates; this is similar to observations of another study that was done in India⁽⁶⁾.

Tramadol was the most commonly abused drug (17% of the patients). Tramadol has been shown to be beneficial in the treatment of acute and chronic pain syndrome^(19, 20). Similar study was done in Baghdad by

Al-Aboodi and refers to the iatrogenic causality in Tramadol abuse⁽²¹⁾. The patients in this study stated that they started their intake of this medicine according to consultations of physicians or following the advice of nurses, and they claim that they were unaware of the potential risk of dependency on tramadol⁽²¹⁾. (16%) of the abusers were on polydrugs. Using multiple drugs is related to availability and costs of the drugs that the patients are in need to, to experience the effects of these drugs, such as sedating, analgesic, excitement euphoria, hallucinogenic and energizing. (13%) of the patients were on Alprazolam, most of the patients stated, that they cannot sleep without taking this drug before going to sleep, to relieve their irritability and fatigue. Their intake of this drug was according to the consultations of physicians and general practitioners but without defining a period for use. Benzhexol abusers were (11%) of patients. Some of patients in our study were chronic schizophrenia, while the others were disaffected and impulsive behavior. Benzhexol was used in patients with chronic schizophrenia for its euphoriant

and anxiolytic effect⁽²²⁾. Abuse of Benzhexol was commonest among the disaffected and disadvantaged youths attending a psychiatric clinic, who reported that their use of the drug was motivated by its hallucinogenic properties⁽²³⁾. Younger schizophrenic patients on Fluphenazine were observed to become dependent on Benzhexol⁽²⁴⁾. In study which was done in Sulaimani city, the psychiatrists observed that some schizophrenics and other psychotic patients on maintenance antipsychotics were demanding Benzhexol with their antipsychotics despite the absence of extrapyramidal side effects. Occasionally they feigned dystonia or other extrapyramidal side effects to convince the physicians to supply them Benzhexol⁽²⁵⁾. Cyproheptidine abusers (9%), all were females; they consumed this type of medication to increase their appetite to gain weight for cosmetic and feminine purposes according to their social background.

In Clonazepam, (7.5%), the abuser either diagnosed epilepsy, or feigning epileptic seizures. Diazepam (4%) and lorazepam(2%) and chlorpheniramine (2%) abused by those patients who suffered from sleep disorders without diagnosis of the causes of their sleep disorders, or were given by physicians as adjuvant with other medications.

Opioid derivatives, cough suppressant syrup such as Pulmocodine® and Tusiram®, (4%) the abusers were, self-administered, got drugs without prescription, to alter one's state of consciousness. The abusers in our study, among men, were unemployed, prisoners, or diagnosed with personality disorders. Some of the abusers claimed that they learned this type of drug abuse from the Egyptians workers in Iraq.

DF118 (0.8%) abuse by patients who were burned with multiple shell injury prescribed by surgeon as painkiller without limited period.

Table 3 shows, the primary sources of drug consumption, (65.1 %) of the patients abused drugs, according to the prescriptions of physicians, general practitioners, nurses, pharmacists and psychiatrist. This means that they were victims of iatrogenic abuse, and this might be due to many causes, the prescribers might be unaware of the potential risk of abuse or dependency of these drugs, lax of prescription habits of few doctors, the low cost and accessibility of these drugs, the dramatic effects of these drugs as painkillers, anxiolytic, appetizers and sedative might reward the patients on continuous consumption. As most of the patients were poorly educated this might led them not to follow the instruction of their doctors regarding the dose and duration of consumptions of these medications.

The comorbid psychiatric disorders were anxiety disorders (18%); including, generalized anxiety disorder 29 (7.8%), posttraumatic stress disorder 25(6.7%) and phobic disorder 13(3.5%) followed by somatoform disorders (12.6%) and this distribution is similar to the study Amer Mostafa in Egypt⁽⁷⁾.

Conclusions:

A drug abuse is an evolving problem in Iraq. Unaware of medical professional of some drugs with potential risks of abuse, lax habit of prescription, free availability and easy access of these drugs, in addition to the characteristic groups of high risk of abuse, such as young males, poorly educated, unemployed, those who were exposed to stressful factors and psychiatric patients.

All these need to be addressed by medical, legal and social authorities.

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