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Socio-demographic profile of a sample of drug dependent patients who visit the psychiatric unit at Al Dewanyea teaching hospital, Iraq

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ABSTRACT

Like many other subjects, not enough data is present about drug addiction in Iraq. So, it is needed to be researched especially for the social and economic impact it has on the society in general. To identify different sociodemographic characteristics of patients with drug abuse and to know what types of drugs that have been abused, and to know the settings that introduced these patients to drugs. A sample of 150 patients was selected from those who attended the psychiatric unit at Al Dewaniya teaching hospital along 6 months' period and were interviewed and diagnosed according to DSM 5 criteria for substance dependence disorders. The mean age of patients was 36.94 ± 11.93 and men formed 88% of the sample. The sample most common sociodemographic characteristics were primary school education (46.7 %), unemployment (45.3 %) and mostly married (44 %). The most commonly abused drug was procyclidine 52.7% followed by diazepam 45.3%, then alprazolam 24.7%. of the sample only (48 %) had psychiatric comorbidity and 70% of them were introduced to drugs via a non-medical source. Procyclidine, benzodiazepines and tramadol are the most commonly used drugs, and patients with mental illness are at risk of developing drug dependence introduced to them via a doctor prescription.



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INTRODUCTION

Substance abuse and dependence is one of the important causes of suffering and impaired functioning especially of the young adults and teenage group (Gore FM, *et al.*, 2011). Dependence also has a significant contribution to social violence (MacLeod J, *et al.*, 2004; Nutt D, *et al.*, 2007; Toumbourou J, *et al.*, 2007). There are many psychological and social factors which affect whether a substance is abused periodically or frequently. An important factor is the availability of the substance in society.

Many substances have the potential to cause dependence; examples are the Benzodiazepines, illicit and licit Opioids, Cannabis, inhalants, psychostimulants such as Cocaine and Amphetamines, Nicotine, Caffeine and anabolic steroids. (Saha TD, *et al.*, 2006; Teesson M, *et al.*, 2002)

The diagnostic criteria for the dependence syndrome are very similar in both the DSM IV and the ICD10. Although these criteria apply for most of the psychoactive drugs that have the potential for reinforcement (examples mentioned above). However, some substances may differ in some of their diagnostic elements. (Lejoyeux M, *et al.*, 2000; Potenza MN 2006).

When people are exposed to potentially addictive drugs not all of them will end up being dependent. Of those who experiment with drugs the ones who will have dependence problems appear to be somewhat more vulnerable personally to be drug addicts, like to be coming from disturbed families, and started taking drugs at a young age. Associated factors may include poor school record, truancy or

delinquency, many of them may have comorbid depression and anxiety.

Genetic factor also plays a role in the development of drug use disorders (Bienvenu OJ, *et al.*, 2011). The risk of drug abuse is more in communities that excuse drug use to some degree, and within groups, there may be peer pressure on adolescents to try drugs.

There are also connections between drug abuse and elements of social deprivation like unemployment and homelessness. (Gill B *et al.* 1996).

The comorbidity of substance misuse and serious mental disorders like schizophrenia or mood disorders is associated with an increased risk of violence and suicide and worse medical and social outcomes. (National Institute 2007)

Opioids

Opioids are the oldest and of the most widely used drugs for helping patients but also have been abused since 300 B.C. For the last decade, the misuse of prescription opioids has displaced Marijuana as the most common illicit drug that teenagers initially abuse (Substance Abuse 2013).

Opiate analgesics may be obtained illegally, but more commonly they are obtained from doctor's prescriptions.

Benzodiazepines: They are mentioned in DSM5 as sedatives, hypnotics or related anxiolytic disorders. Are also more commonly abused as prescription drugs and of which Alprazolam is the most commonly abused but also others like Diazepam, Lorazepam and Flunitrazepam.

In Benzodiazepines misuse women are at higher risk than men (Substance Abuse 2013).

Stimulants: Stimulant related disorders include the misuse of Amphetamines, Cocaine, recent synthetic stimulants (bath salts) and compounds of plant origins (Ephedra and Khat). There is a pure crystalline form of the D-isomer which is also referred to as (Crystal Meth).

Others: The other or unknown substance-related disorders may include Anabolic steroids, Cortisol, Antihistamines and Anticholinergics.

Anticholinergics are commonly prescribed by psychiatrists to treat extrapyramidal side effects of antipsychotic drugs, especially the first generation drugs. (Weiner I, *et al.*, 1997; Shamran AR, *et al.*, 2018).

Anticholinergic misuse although previously thought to be not common, was reported in some clinical settings especially in patients with severe psychiatric disorders in which the prevalence of abuse could be up to 34%. (Ogino S, *et al.*, 2014).

In Iraq: In a survey that was conducted in Iraq in 2009 the results were that the prevalence of drug abuse was 7.02%. (Buhrich N, *et al.*, 2000).

Also, the most widely used drugs in most of the country were sedative-hypnotics and benzhexol. (Nesif J. Al-Hemiary 2012).

Aims of the study

- To identify the different sociodemographic characteristics of drug dependent patients
- To know which drugs are commonly abused by these patients.
- To know the setting at which patients were first exposed to drugs and whether psychiatric comorbidity is a risk factor.

PATIENTS AND METHODS

Sampling

This is a cross-sectional study.

Patients were collected from those who regularly attend the psychiatric unit at Al Dewanyea teaching hospital for a period of 6 months from the 1st of March to 1st of September 2018.

Verbal consent was obtained from all patients who participated in the study.

METHODS

The diagnostic criteria used were the DSM5 criteria for drug dependence.

After diagnosis, the patients answered questions regarding their age, job, educational level, marital status and the source from where they had their first drug experience weather from a non-medical source like a friend or a drug dealer or from a doctor prescription.

Psychiatric comorbidity was also screened; some patients were known schizophrenic patients and on antipsychotic medications for years while others had different psychiatric diagnoses.

RESULTS

Only 34.66% of the patients (no.52) were abusing a single drug while the rest of the sample 65.33% (no. 98) were abusing multiple drugs.

DISCUSSION

The majority of the sample were males who formed 88%, and this is consistent with most studies conducted on the subject.

The mean age of the sample was found to be 36.94+_11.93, and about two-thirds of patients fall into the 20-40 years' age group which is observed in other studies like Rather Y H *et al.*, 2013; Kadri A.M., *et al.*, 2003; Onyeka I N *et al.*, 2012.

However, the mean age in our study is higher than the above-mentioned studies which can be explained by the assumption that younger patients may hesitate to seek medical advice for such a socially stigmatising matter in a general hospital.

Table 1: Total number of patients was 150 cases and their socio-demographic features

Characteristics		Value
Age	Mean SD	36.94 ±11.93
	Range	16 - 70
	<20	6 (4.0 %)
	20-40	94 (62.7 %)
	> 40	50 (33.3 %)
Gender	Male	132 (88 %)
	Female	18 (12 %)
Comorbidity		72 (48 %)
Job	Military	36 (24 %)
	Self-employed	24 (16 %)
	Unemployed	68 (45.3 %)
	Retired	11 (7.3 %)
	Employee	7 (4.7 %)
	Police	4 (2.7 %)
Education	Illiterate	59 (39.3 %)
	Primary	70 (46.7 %)
	Secondary	20 (13.3 %)
	College	1 (0.7 %)
Marital status	Single	58 (38.7 %)
	Married	66 (44 %)
	Divorced	26 (17.3 %)

Table 2: Source of drug

Source	n	%
Non-medical	105	70
Doctor	45	30
Total	150	100

Table 3: Drugs

Drug	n	%
Procyclidine	79	52.7
Diazepam	68	45.3
Alprazolam	37	24.7
Clonazepam	25	16.7
Tramadol	24	16.0
Lorazepam	15	10.0
Pulmocodine	6	4.0
Somadril	5	3.3
Thinner	2	1.3
Crystal	2	1.3

Almost half of the sample (45.3%) are unemployed, a finding that differs from other studies like Kadri and Rather (Al-Hasnawi, S. M., *et al.*, 2009; Rather Y H *et al.*, 2013).

This finding can be considered both a risk factor and a result of drug abuse that most of these patients have no jobs.

The second largest group are the military force employees who form 24% of the sample, and this is

consistent with many articles that cite being a member of military forces as a risk factor for substance abuse due to the stressful nature of their work and the many psychiatric problems that they suffer from (22%).

The majority of patients had a low educational level (illiterate and primary) which is similar to the findings of Oneyka *et al.* while it differs from Kadri *et al.* and Rather *et al.* in which high school education was the most prevalent educational level especially when we know that illiteracy is still a very common problem in our country in comparison with other countries. (Al-Hasnawi, S. M., *et al.*, 2009; Rather Y H *et al.*, 2013; Kadri A.M., *et al.*, 2003).

Regarding the data on marital status, the largest group were the married, unlike the finding in Rather *et al.* which may be explained by the fact that our sample is somewhat older and our society considers marriage to be an integral and respected aspect of life (Al-Hasnawi, S. M., *et al.*, 2009).

Regarding the drugs used by our study sample the most commonly abused drug was the anticholinergic drug Procyclidine followed by some Benzodiazepines. Then Opioids in the form of Tramadol and Pulmocodien. In addition to the drug Crystal (an Amphetamine) which was used only by two patients and another two were inhaling the solvent Thinner.

This list of drugs when categorized is somehow similar to results from other studies carried out in the country recently like the Survey Of Substance Abuse In Iraq or in Al Hemiary *et al.* and Al Hasnawi *et al.*, with the noticeable difference is that in previous studies Benzhexol rather than Procyclidine was the prevalent anticholinergic in the market, but as more reports surfaced of higher numbers of people abusing it, it became more difficult to obtain from regular pharmacies unlike Procyclidine which is still prescribed as treatment for Parkinson disease or by psychiatrists to treat extrapyramidal side effects of antipsychotic medications and now maybe it is becoming the new trend that is dominating the prescription drug addiction community in the Iraqi population. (National Institute 2013; Buhrich N, *et al.*, 2000; Nesif J. Al-Hemiary 2012).

We asked the patients about the setting where they were first introduced to drugs whether from non-medical sources like friends, acquaintances or a local drug dealer or medical source via a doctor prescription and we examined if there was an association between the presence of psychiatric comorbidity and first exposure to drugs at a medical setting and the association was highly significant ($p < 0.001$).

Table 4: Association between Comorbidity and source of drug

Comorbidity	Source			P*
	Total	Non-medical	Doctor	
Yes	72	40 (55.6 %)	32 (44.4 %)	<0.001
No	78	65 (83.3 %)	13 (16.7 %)	HS
Total	150	105 (70.0 %)	45 (30.0 %)	

*: Chi-square test; HS: highly significant

This finding is consistent with many studies like Naja W.A and reports from the National Institute of drug abuse, and that may indicate that patients with mental illness are at high risk of developing prescription drugs dependence and that doctors should be more cautious when prescribing potentially addictive drugs to such patients. (Hamzah Abdulhussein, H., & Lateef Al-Awsi, G. 2019; Dohan Chalap, E., & Lateef Al-Awsi, G. 2019; Lateef, G., *et al.*, 2018).

CONCLUSION

Most of the drug dependent patients attending the psychiatric unit at Al Dewanyea teaching hospital are unemployed, married, uneducated males. Pro-cyclidine, Diazepam and other Benzodiazepines, Opioids like Tramadol and Pulmocodiene are the most commonly abused drugs. There is a highly significant association between having psychiatric comorbidity and being first exposed to drugs at a medical setting

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