

CLINICAL NOTE

CURRENT SUBSTANCE USE AMONG PSYCHIATRIC PATIENTS

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Background-Little is known about the relationship between substance use and the onset of psychiatric disorders, and studies examining this relationship have been inconclusive. The goal of the current study was to present and discuss data concerning substance use among patients with mental disorders in Iran.

Methods-A sample of 205 psychiatric patients (70 women, 135 men; mean age, 35 years [SD = 10.4, range, 16–69]). was randomly chosen. The subjects, who had schizophrenia or mood disorders, were evaluated by interview using a confidential questionnaire.

Results-Of the participants, 76% of the men and 34% of the women admitted to substance use at any time: cigarettes (men 74%, women 31.4%), opioids (men 31.9%, women 4.3%), alcohol (men 23.7%, women 3.4%), hashish (men 8.9%, women 0%), marijuana (men 3.7%, women 0%), and cocaine or LSD (0%). Only 27% of the women and 63% of the men reported still using a substance regularly (some reported using more than one). Of those, 61.8% of the schizophrenics, 20% of those with unipolar depression, and 37.5% of bipolar patients reported current use. The reasons for substance use in order of frequency were, for men: 1) release of tension; 2) pleasure seeking; and 3) need (to avoid withdrawal symptoms). For women, they were: 1) habit; 2) pleasure seeking; and 3) need.

Conclusion-Substance use should be a major focus of risk assessment for psychiatric settings. These findings can be considered for therapeutic and preventive programs for substance users among psychiatric patients.

Keywords • Epidemiology • psychiatric patient • substance abuse

Introduction

Substance dependence is a psychiatric disorder.^{1,2} Psychiatric disorders affect a significant part of the population, and substance use disorders are among the most common mental disorders.³ The Epidemiologic Catchment Area (ECA) study, which involved personal interviews with 20,000 individuals from five states in the USA, showed that just under 14% of the population had alcohol use disorders at some time in their lives.⁴ The national comorbidity survey⁵ carried out between 1990 and 92 examined the extent of comorbidity between substance use and other psychiatric disorders using a revised

version of the Composite International Diagnostic Interview (CIDI).⁶ The National Comorbidity Survey (NCS) indicated that 14% of men and 5% of women met criteria for an alcohol use disorder in the last year, and 24% during their lifetime.⁷ In the NCS, men were more dependent than women, and the lifetime prevalence of substance use disorders was 15% for men and 9% for women; the 1-year prevalence of these disorders was 5% for men and 2% for women.

Very little is known about substance dependence in Iran. Iranian drug policy states that the penalties for possession and use of all illegal substances are arrest or even imprisonment. Alcohol is both religiously and legally prohibited. Illicit substances include: cannabis, cocaine, heroin, opium, alcohol, stimulants and hallucinogens.

The goal of the current study was to present and

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Table 1. History of past and current substance use among 70 female and 135 male subjects.

Substance	Ever used, number (%)			p Value*	Current use, number (%)			p Value*
	Male	Female	Total		Male	Female	Total	
Alcohol	42 (14)	2 (0.7)	44 (7.3)	0.000	22 (7.3)	1 (0.3)	23 (3.8)	0.000
Cigarettes	167 (55.7)	65 (21.7)	232 (38.7)	0.000	125 (41.7)	49 (16.3)	174 (29)	0.000
Opioids	54 (18)	4 (1.3)	58 (9.7)	0.000	41 (13.7)	2(0.7)	43 (7.2)	0.000
Heroin	6 (2)	0 (0)	6 (1)	0.030	4 (1.3)	0 (0)	4 (0.7)	0.123
Hashish	7 (2.3)	0 (0)	7 (1.2)	0.015	5 (1.7)	0 (0)	5 (0.8)	0.061
Marijuana	2 (0.7)	0 (0)	2 (0.3)	0.499	2 (0.7)	0 (0)	2 (0.3)	0.499
Morphine	1 (0.3)	0 (0)	1 (0.2)	1	1 (0.3)	0 (0)	1 (0.2)	1
Total	175 (58.3)	70 (23.3)	245 (40.8)	0.000	131 (43.7)	51 (17)	182 (30.3)	0.000

*Difference between males and females using the Embedded Figures Test.

discuss data concerning substance use among patients with mental disorders in Iran.

Patients and Methods

Sample

Of 615 psychiatric inpatients (210 women and 405 men) from all psychiatric hospitals in Shiraz (which lies in the center of the Fars Province), 205 inpatients were selected by cluster random sampling. There were 70 women and 135 men with a mean age of 35.0 years (SD = 10.4; range, 16–69).

Evaluation procedure

All patients underwent a semi-structured interview based on Diagnostic and Statistical Manual IV (DSM-IV) criteria, followed by a brief explanation of the reasons for the implementation of the study. Patients' charts were also reviewed at the same time. Patients were informed that their responses would be confidential, and the issue of informed consent was discussed. A semi-structured interview included questions on sex, age, marital status, and whether patients used any substance, illicit drugs in particular, at any time in the past or at present, with the added intention of identifying reasons or motivations for substance use. DSM-IV

criteria obtained from medical records were used for diagnosis of the patients.^{12,13}

Analysis

Data analysis was carried out using the SPSS software program. A chi-square test was used to test the frequencies and a t-test was used for comparing the means.

Results

Of the subjects, 76.1% of the 135 men and 34.3% of the 70 women reported having used substance once or more in their lives: cigarettes (74.1% of men, 31.4% of women; $p = 0.001$); opioids (31.9% of men, 4.3% of women; $p = 0.001$); alcohol (23.7% of men, 4.3% of women; $p = 0.001$); hashish (8.9% men, 0% of women; $p = 0.02$); and marijuana (3.7% of men, 0% of women; NS) (Table 1). No one reported using cocaine or LSD. Some respondents reported using more than one substance.

Only 27% of the women and 63% of the men reported current regular use over the past 30 days (Table 2). Of the current users, 61.8% of the schizophrenics, 20% of the unipolar depressed, and 37.5% of the bipolar patients reported current

Table 2. Reasons for substance use given by study subjects who reported at least one instance of substance use.

Reason	Number (%)			χ^2	p Value*
	Male	Female	Total		
Modeling	57 (19)	23 (7.7)	80 (13.3)	16.67	0.000
Pleasure	130 (43.3)	35 (11.7)	165 (27.5)	75.44	0.000
Release of tension	24 (8)	14 (4.7)	38 (6.3)	2.80	0.093
Depression	15 (5)	10 (3.3)	25 (4.2)	1.043	0.307
Others	16 (5.3)	5 (1.7)	21 (3.5)	5.97	0.014

*Difference between males and females using the Embedded Figures Test.

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substance use. The reasons for substance use given by men were: release of tension, pleasure seeking and need to avoid withdrawal symptoms. Reasons given by women were: habit, seeking pleasure and need (Table 3).

In the current study, substance use came after mental illness in all patients and not before.

Discussion

The majority of the Iranian population is below 25 years (~ 60%) and a large proportion of these are students. In a study investigating the rate of substance use in Iranian senior high school students, 14% of boys reported using cigarettes and 5.7% were currently using other substances.⁸ In research on substance use among Iranian university students, 24% of the students reported using a substance at some time in their lives.⁹ Substance use among university students was more common in men than in women.⁹

Substance dependency and abuse are typified by wide variation in use patterns and individual responses. Behavioral psychology indicates that, if something reduces human discomfort or enhances pleasure, a subject is likely to repeat the behavior. Evidence has shown that substance users express a sense of enjoyment during use. This is related to the psychoactive drug effects of stimulating and increasing release of neurotransmitters and hormones necessary for the sense of pleasure.¹⁰ Substance use, especially of opioids, can be a significant factor in the reduction of aggressive behaviors; therefore, psychiatric patients use substances to relieve their tension thereby increasing their pleasure. They sometimes use substances as an attempt to self-medicate.¹¹

Our results suggest that most substance users in Iran are males. Unfortunately, our study sample included nearly twice as many men as women.

There is an important reason for the larger sample of men: Iranian women are less likely to use substances because they have a negative social attitude towards them.

Tobacco use appeared to be high among Iranian psychiatric patients, not only among past but also current users. A significant number of Iranians believe that nicotine is not addictive. Opium was widely used as self-medication in treating mental disorders as well as for pleasure.

These findings can be considered for therapeutic and preventive programs among substance users.

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Table 3. Reasons for substance use given by study subjects who reported substance use during the past 30 days.

Reason	Number (%)			χ^2	p Value [†]
	Male	Female	Total		
Habit	78 (26)	27 (9)	105 (17.5)	30.02	0.000
Need*	30 (10)	5 (1.7)	35 (5.8)	18.96	0.000
Pleasure	31 (10.3)	18 (6)	49 (8.2)	3.75	0.052
Release of tension	21 (7)	9 (3)	30 (5)	5.05	0.024
Depression	13 (4.3)	8 (2.7)	21 (3.5)	1.23	0.266
Other	6 (2)	1 (0.3)	7 (1.2)	3.49	0.061

*Avoidance of withdrawal symptoms; [†]Difference between males and females.

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