

# Substance Use Disorders in Rheumatic Patients

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## Abstract

**Background:** The current research assessed the prevalence of substance use among patients with rheumatic diseases who were admitted in different rheumatic wards at Shiraz general hospitals. **Methods:** In a cross-sectional survey using a structured interview and DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> ed.) criteria for substance dependence, 160 inpatients with rheumatic diseases selected randomly from general hospitals in Shiraz city. **Results:** A percentage of 39.4% (52.5% of men and 26.3% of women) reported the use of substance(s) once or more in their lives. The majority (37.5%) used tobacco. None used cocaine or LSD. A percentage of 32.5% (43.8% of men and 21.3% of women) were current substance users. The majority (31.3%) were nicotine users, and 6.9% were opium users. The reported reasons for initial use of substance(s), in order of frequencies, were Enjoyment, Modeling (Imitation) and Release of tension, and also for current users were, Habit, Enjoyment, Release of tension, Depression and Need. **Conclusions:** Substance use was found to be higher among men than women. This is in contrast with findings in the West, which indicate that lifetime substance use does not vary significantly by gender. In Iranian culture, people especially women dislike to smoke tobacco or opium, or take other illegal drugs, and this positive idea is probable explanation of the difference. There was no report of cocaine or LSD use. Cultural attitudes toward substance use were found to affect the type and amount of use. These findings can be considered when planning preventive programs (German J Psychiatry 2005;8:66-69).

**Keywords:** Substance abuse; rheumatic patients

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## Introduction

A number of the Iranian patients uses substances such as opium and tobacco for therapeutic purposes such as pain relief or reduction of tension. Opium (a natural opiate derived from poppy plant) was known to the ancient Persians and has been traditionally used for relieving of pain, for treating diseases and also for enjoyment.

Limited scientific information is published on substance use disorder among patients in Iran. A recent research showed that 3.8% of Iranian women and 26% of men were

cigarette smokers (Ahmadi, et al, 1999). An earlier study concluded that the opium addiction rate was 0.07 per capita, and the rate of registered opium addicts was 0.01 per capita in a rural population of the northern part of Iran (Alemi, 1978).

Iranian drug policy states that if individuals are found to be in possession and using illegal substances such as heroin, opium, morphine, cannabis, LSD, hallucinogens, stimulants, cocaine and alcohol they could be arrested and may be imprisoned (tobacco products are legal). If addicts refer themselves voluntarily to hospitals, private clinics or treatment centers, they are not arrested.

**Table 1. Number of Subjects who Reported Usage of Substance at Least Once or More in Their Lives.** Respondents were allowed to list more than one answer (substance). P, differences between men and women; F, women; M, men; T, total; \* = Fisher's exact test

Sub-stance		Used		Never Used		X <sup>2</sup>	P
		N	%	N	%		
		Tobacco	M	40	50		
	F	20	25	60	75		
	T	60	37.5	100	62.5		
Opium	M	13	16.3	67	83.8	14.14	.00017
	F	0	0	80	100		
	T	13	8.1	147	91.9		
Heroin	M	1	1.3	79	98.8	*	NS
	F	0	0	80	100		
	T	1	.6	159	99.4		
LSD	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
Cocaine	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
Hashish	M	4	5	76	95	*	NS
	F	0	0	80	100		
	T	4	2.5	156	97.5		
Marihu-ana	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
Morphine	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
<b>Total</b>	M	42	52.5	38	47.5	11.54	.00068
	F	21	26.3	59	73.8		
	T	63	39.4	97	60.0		

**Table 2. Number of Subjects who Reported Current Usage of Substance.** Respondents were allowed to list more than one answer (substance). P, differences between men and women; F, women; M, men; T, total; \* = Fisher's exact test

Sub-stance		User		Non User		X <sup>2</sup>	P
		N	%	N	%		
		Tobacco	M	34	42.5		
	F	16	20	64	80		
	T	50	31.3	110	68.8		
Opium	M	11	13.8	69	86.3	11.81	.00059
	F	0	0	80	100		
	T	11	6.9	149	93.1		
Heroin	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
LSD	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
Cocaine	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
Hashish	M	3	3.8	77	96.3	*	NS
	F	0	0	80	100		
	T	3	1.9	157	98.1		
Marijuana	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
Morphine	M	0	0	80	100		
	F	0	0	80	100		
	T	0	0	160	100		
<b>Total</b>	M	35	43.8	45	56.3	9.23	.00238
	F	17	21.3	63	78.8		
	T	52	32.5	1.8	67.5		

**Table 3 Reasons For Subjects who Reported Usage of Substance at Least Once.** Respondents were allowed to list more than one answer. P, differences between men and women; F, women; M, men; T, total; \* = Fisher's exact test

Reason		Number	Percent	X <sup>2</sup>	P
Modeling	M	14	17.5	2.68	NS
	F	7	8.8		
	T	21	13.1		
Pleasurable Purposes	M	27	33.8	11.61	.00066
	F	9	11.3		
	T	36	22.5		
Release of Tension	M	12	15	2.25	NS
	F	6	7.5		
	T	18	11.3		
Depression	M	6	7.5	.42	NS
	F	4	5		
	T	10	6.3		
Other	M	4	5	*	NS
	F	1	1.3		
	T	5	3.1		

**Table 4. Reasons for Subjects who Reported Current Usage of Substance.** Respondents were allowed to list more than one answer. P, differences between men and women; F, women; M, men; T, total; \* = Fisher's exact test

Reason		Number	%	X <sup>2</sup>	P
Habit	M	20	25	6.23	.01253
	F	8	10		
	T	28	17.5		
Need (Avoid Withdrawal Symptoms)	M	6	7.5	*	.02836
	F	0	0		
	T	6	3.8		
Pleasurable Purposes	M	14	17.5	1.89	NS
	F	8	10		
	T	22	13.8		
Release of Tension	M	8	10	.75	NS
	F	5	6.3		
	T	13	8.1		
Depression	M	5	6.3	*	NS
	F	4	5		
	T	2	5.6		
Other	M	2	2.5	*	NS
	F	0	0		
	T	2	1.3		

Since in Iran some patients, who are physically or mentally ill, use substances such as opium, tobacco, etc. to treat their disease, to relieve their pain or to reduce their stress; therefore it is of interest to assess substance use among them. This study evaluated the rate of substance use among patients who were admitted in different rheumatic wards at Shiraz general Hospitals.

## Methods and Materials

One-hundred sixty inpatients with rheumatic disease were chosen by area and cluster random sampling from different wards at Shiraz hospitals. All patients were interviewed by means of a structured questionnaire, including DSM-IV criteria for substance dependent disorder (APA, 1994). They were asked to identify their demographic characteristics such as age, sex, and marital status, and also to explain what substance(s) were used for the first time, reason/motivations(s) for substance use, and also explain what substance(s) were currently used, and motivation for current use.

Data were gathered from 160 inpatients (80 men and 80 women) whose mean age was 38.1 yr., and SD was 17.38.

Data analysis was done by using SPSS (Social Science Statistical Program). Chi-square analyses and Fisher's Exact Test (FET) were used to test the frequency differences between the groups, and t-test analyses were used to test the mean differences between the groups. T-tests were two-sided with significance set at  $P < 0.05$ .

## Results

Table 1 shows the frequency of subjects who reported substance use once or more in their lives. A percentage of 39.4% (52.5% of men and 26.3% of women) reported the use of substance(s) once or more in their lives. The majority (37.5%) used tobacco, and 8.1% used opium. Nobody used LSD or cocaine. The mean ages for ever users and nonusers were 38.65 yr., (SD= 15.92) and 37.75 yr., (SD= 18.34), respectively.

Table 2 summarizes the frequency of patients who reported current substance use (substance dependent based on DSM-IV criteria). A percentage of 32.5% (43.8% of men and 21.3% of women) were current substance dependent. The majority (31.3%) was nicotine dependent, and 6.9% were opium dependent. The mean ages for current users and nonusers were 33.11 yr., (SD=12.95) and 36.4 yr., (SD=18.33), respectively.

The motivation or reasons for patients' first use of substance(s) are summarized in Table 3. Enjoyment (22.5%) was the first cited reason for substance use. Modeling (imitate behavior of other people) (13.1%) was the second most common reason given.

Table 4 shows the motivation or reasons for currently using substance(s). The majority (17.5%) reported Habit as the reason for taking the substance. Enjoyment (13.8%) was the second most common reason listed, and only 6% reported Need.

## Discussion

The relationship between having rheumatic illnesses and substance use is well known. Depression and anxiety are found to be high among patients with chronic diseases such as diabetes, hypertension, malignancies, rheumatic and orthopedic diseases, etc (Ahmadi, 1994, 1992 & 1991).

It appears that in a number of patients in Iran, opium is used as pain killer and hypnotic, and tobacco is used as tranquilizer. Concerning drug policy in Iran, it should be noted that alcohol consumption is both religiously and legally prohibited and use of other drugs except tobacco is legally prohibited.

Substance use was found to be significantly higher in males. We found that males were at greater risk of both ever using and dependency and this will assist in focusing strategies. This is in contrast with findings in the West, which indicate that lifetime substance use does not vary significantly by gender (Gulliver et al, 2000; Coleman et al., 1997). In Iranian culture, people especially women dislike to smoke tobacco or opium, or take other illegal drugs, and this positive idea is probable explanation of the difference.

Tobacco use was found to be the most prevalent form of substance use among rheumatic patients. Opium was the second most common drug used. In our study nobody reported usage of cocaine, LSD or other hallucinogens. It appears that western attitudes toward drugs have had little effect on the pattern of substance use in Iran.

This research was confined to Shiraz (capital of Fars province), a large city located in the southern part of Iran, so care must be taken not to generalize these results to the full Iranian patients.

## Conclusion

Tobacco, and opium were the most common used substances. Use of substances was significantly higher in males. There was no report of LSD, cocaine or hallucinogens use. Cultural attitudes toward substance use were found to be important factors for substance use. These results can be considered for preventive and therapeutic programs.

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