

ORIGINAL ARTICLE

COMORBIDITY OF MOOD DISORDERS AND SUBSTANCE USE DISORDER

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Background – Numerous studies in various countries have documented comorbidity of mood disorders and substance use disorder, but little have been published on this subject from Iran. This study was performed to investigate such comorbidity in patients with substance use disorder.

Methods – The subjects of the study were 1,017 opioid-dependent patients referred to or taken care of in Razi Psychiatric Hospital and Private Psychiatric Clinic of Tabriz University of Medical Sciences, Tabriz, Iran. They were assessed by means of Symptom Check List-90 Revised (SCL-90 R), the fourth edition of diagnostic and statistical manual of mental disorders (DSM-IV) criteria and Beck test which had been translated to Persian in three years (from August 1998 to July 2000). All of the subjects were unpaid and volunteers. We used SPSS 11.5 for our statistical analysis and ethical principles were considered in all stages of the study.

Results – The comorbidity rate of all types of mood disorders with every substance use disorder was found in 71.2% of all subjects. Of the studied subjects, 31.2% were of low education (could only read and write). The frequency of dysthymic disorder was 6.6% and the mean score of global assessment function was 57.6%.

Conclusion – The comorbidity of psychiatric disorders, especially mood disorders, with substance use disorder is frequent, with the most potent and generous substances having the highest comorbidity rates.

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Keywords • comorbidity • mood disorders • substance dependence

Introduction

The prevalence of psychiatric disorders in opioid-dependent individuals is high. About 70 to 90% of people with opioid dependence have an additional psychiatric disorder.¹⁻⁶

The most common comorbid psychiatric diagnoses are depression, alcohol-related disorders, antisocial personality disorder, and anxiety disorder.^{1, 7-9} About 15% of people with opioid dependence attempt to commit suicide at least once.⁶ Comorbidity with other psychiatric diagnoses highlights the need for extensive treatment programs that also address patients' associated psychiatric disorders.^{1, 2, 10, 11}

After the Islamic revolution in Iran, the problem

of alcoholic drinks has been controlled owing to their public use and distribution prohibition by the government, however, opioid-related problems have not yet been solved despite extensive control measures.¹⁰ The latest statistics estimate the prevalence of opioid addicts at 2%.¹² The figures provided by Welfare Organization (Behzisty) concomitant with The United Nations International Drug Control Program (UNDCP) indicate that there are 1,200,000 real addicts and 800,000 fairly opioid-dependent individuals.^{13, 14} Based on the above-mentioned facts, we tried to investigate the comorbidity of mood disorders among substance users in two centers of Tabriz University of Medical Sciences.

Patients and Methods

From August 1998 to July 2000, 1,017 opioid-

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dependent patients referred to or taken care of in Razi Psychiatry Hospital and Private Psychiatric Clinic of Tabriz University of Medical Sciences were investigated by selected residents under supervision of the author. We used Symptom Check List-90 Revised (SCL-90 R), the fourth edition of diagnostic and statistical manual of mental disorders (DSM-IV) criteria, and Beck test which were translated to Persian; the reliability and validity of the translations of these scales and tests were improved by statistical analysis (SPSS) and psychiatrists of Tabriz University of Medical Sciences. In addition, all of these criteria and tests were chosen from reference books,^{4, 5} and medical ethics and common sense were considered in all aspects of the study.

First of all, the diagnosis of mood disorders was established for each patient. Afterwards, substance dependence was detected based on the statements of each patient and his relatives (history), physical examination, and urinalysis (in suspicious patients). Subjects were all unpaid volunteers and their functions were assessed using DSM-IV Global Assessment Functioning (GAF) scale.

Results

As it is evident in Table 1, the subjects were predominantly males (94.3%). According to Table 2 which shows the education level of the subjects, 31.2% of them had received poor education; they could only read and write.

Table 3 shows that the most frequent age distribution of addicts is in the 20 – 40 years age group, which implies an increased risk of opium dependence among young adults. The mean age was 28.07.

In addition to substance use disorders, 71.2% of opioid-dependent subjects also met the criteria of mood disorders according to SCL-90 R, Beck test, and DSM-IV criteria (Table 4).

Opioid-dependent individuals frequently suffer from psychiatric disorders such as depressive disorder, alcohol-related disorder, anxiety, and antisocial personality disorder.^{4, 14 – 16} Opioid-related disorders a lifetime mood disorder excluding substance use disorder in 67.4% subjects.

Table 1. Sex distribution of opioid-dependent subjects.

Male	Female	Total
980	37	1017
94.3%	3.7%	100%

Table 2. Education level of the opioid-dependent subjects.

Education	Frequency	Percentage
Illiterate	248	24.3
Reading and writing	376	31.23
Primary	272	26.8
Guidance and high school	123	17.98
Total	1,017	100

A lifetime substance use disorder was found to be 59.6%. The mean score of global assessment function was 57.6%.

Discussion

Opioid dependency is a global problem influenced by various factors such as social and political conditions as well as the individual's family status and his psychological and physical characteristics. It is also closely related to psychiatric diseases and physical adverse effect especially hepatitis B, endocarditis, pneumonia, tuberculosis, pneumothorax, nephrotic syndrome, peripheral neuropathy, transverse myelitis, cerebral abscess, AIDS, bacterial infection, meningitis, osteomyelitis, and abscesses.^{1, 15, 16}

Many studies have reported a high rate of comorbidity in opioid abusers. According to the commonest recognition of the psychiatrist, 70 to 90% of opioid-dependent individuals suffer from psychiatric disorders such as depressive disorder, alcohol-related disorders, anxiety, and antisocial personality disorder.^{4, 14 – 16} Opioid-related disorders are the source of some physical and psychiatric disorders.^{16, 6, 7} Other studies have reported lifetime comorbidity rates of substance use and mood disorders to be 19%, 60%, and more than 70%.¹¹ In the present study, we found a comorbidity rate of 71.2% which may be explained by differences in populations and method of interview. Variety in the diagnostic systems may also produce different rates of comorbidity especially for mood disorders. In our study, substance-induced mood disorder rate was found to be 59.4%, which compared to the 59.6% rate found in other studies.

Control of opioid dependence among youngsters and teenagers demands the

Table 3. Distribution of opium dependence in different age groups.

Age group	Frequency	Percentage
15 – 19	263	26.182
20 – 24	285	28.07
25 – 29	249	24.60
30 – 35	215	21.13
Total	1,017	100

Table 4. Lifetime and current comorbidity rates of mood disorders (Symptom Check List-90 Revised, Beck test, and interview according to DSM-IV for mood disorders) and opioid dependency.

Disorders	Lifetime		Current	
	n	%	n	%
All mood disorders (excluding substance use disorders)	60	67.4%	724	71.2%
Mood disorders				
Substance-induced mood disorder	53	59.6%	430	59.4%
Dysthymic disorder	0	0	48	6.6%
Mood disorder due to general medical condition	2	2.2%	48	6.6%
Major depressive disorder	3	3.4%	74	10%
Bipolar I disorder	1	1.1%	34	4.6%
Bipolar II disorder	0	0	28	3.8%
Other bipolar disorders	1	1.1%	43	5.9%
Depressive disorder not otherwise specified (NOS)	0	0	19	2.6%

n = number

mobilization of all of the responsible organizations. The early results of the studies done by the UN in years 1998 and 1999, to estimate the misuse of narcotics in Iran, shows that 93.4% of the opioid-dependent individuals are 23 to 44 year-old males. On the other hand, 56.7% of the interviewees and 98% of the opioid-dependent were married and lived with their parents.¹⁴

Similar to the studies performed by the Welfare Organizations, this study showed that most of the substance-dependent individuals were males.¹⁴ This study also showed that most opioid-dependent individuals were young adults, which confirmed the study conducted in Iran by the UN with the cooperation of Welfare Organization and Chein (1956), London.^{13, 16} It is a warning to the nation calling for proper decisions and solutions by the responsible.

Another finding of this study was the fact that the opioid-dependents were frequently found to be of low education or illiterate, therefore, eradicating illiteracy and facilitating education should be continued. The study also showed that most of the opioid-dependents were unemployed. Decreasing unemployment can prevent opioid-dependence disorder. Finally, it is noteworthy that due to the high comorbidity rates of mental disorders with opioid dependency, there should be a vast treatment plan to cure opioid dependency and mental disorders.

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