

## Investigating the rate of use of drugs by the bipolar patients who are confined to bed in Rusbeh hospital of Tehran

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**Abstract:** Bipolar disorder is the sixth popular disability of the adults in all around the world. The popularity of such disorder, reported by the authors, is about 2/5 – 65 percent (Baver & Fining, 2005). Evidences show that the bipolar patients use always various drugs. Since there is no report about the rate of use of drugs by the bipolar patients of Tehran's Ruzbeh hospital, the current study is aimed to investigate such issue in 2012. **Method:** this is a descriptive – sectional study. The populations include 100 patients of Rusbeh hospital of Tehran in 2012 that were selected by simple sampling method. Due to the interview of the psychologists and DSMVI diagnostic criterions, it became clear that the patients are suffering from such disorder. The questionnaire related to use of drugs was completed with respect to the gathered data and clinical interview of the psychologist. The patients' demographic information was recorded in the questionnaire and the results were also analyzed. **Results** 55 out of 100 patients were male and the others were female. They were 33 years old. 51 patients were suffering from the disorder between the ages of 16 and 31. Moreover, they consumed drugs between the age of 10 and 31. About %58 consumed such drugs and %39 was costumed to consume between 1-10 years. About %66/3 consumed various drugs and %33/7 consumed only one drug ( alcohol %37/21, glass %19/49, bhong %14/24, crack %9/54, opium %19/49). Furthermore, about %57 of the patients have the family record of this disorder. The females consumed mostly glass (%66/9) and the males consumed alcohol (%51/1). There was a direct relationship between the use of the drug and the factors such as gender, employment and family record of the disorder ( $P < 0/5$ ). Moreover, there was no relationship between the use of each drug and the factors such as education, the period of being confined to bed, age, outset of the disorder, duration of the use, beginning of the use and marriage ( $p < 0/5$ ). In this study, about %35 of the women and %7 of the men were addicted to the narcotic drugs.

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**Key words:** bipolar, use of drugs, the patients being confined to bed.

### 1-Introduction

Bipolar disorder is the sixth main disorder among the adults of the world (Liu 2010, Rehm et al 2006, Sherwood et al, 2001). The bipolar spectrum disorders take root of the chronic disorders along with various fluctuations (Maremmani et al 2006). In reality, bipolar disorder is a chronic disorder with the symptoms such as depression, mania and hypomania (Sadock & Sadock, 2003). During the person's life time, the disorder is appeared by 2/8 to 65 percent (Bauer & Pfennig 2005). Evidences show that stability of the disorder is totally between 1/3 – 1/7 percent (Rejir et al, 1990; Kesler et al, 1996) (Sherwood Brown et al 2001). The use of drug since creases with the appearance of bipolar disorder (Kessler et al 2005). In reality, evidences show that the bipolar disorders are appeared along with the use of drugs and addiction (Maremmani et al 2006). In other words, there is a relationship between bipolar disorder and misuse of the drugs (Weiss et al 2004). Evidences show that the

bipolar disorder takes root of the misuse of the drugs (De Hert et al 2011). By analyzing data, the authors concluded that about %12/5 of men and %6/4 of women are severely addicted to alcohol. Moreover, % 20/1 of men and % 8/2 of women are affiliated to drinking alcohol. About %5/4 of men and %3/5 of women are addicted to drugs and %9/2 of men and %5/9 of women are partly affiliated to using drugs (Young et al 1987). From the evidences, it becomes clear that the persons suffering from bipolar disorder tend to commit suicide (Comtois et al 2004). Scientists have estimated the possibility of appearance of such disorders in the patients' life about 15 percent (Tsai et al 2007). Both alcohol drinking and bipolar disorder have negative influence on the bipolar episode (Cardoso et al 2008).

In comparison with the bipolar patients not using alcohol, misuse of alcohol causes the patients

- To show weak respons to the therapy

- To be confined to bed more than the necessary time
- To be weak
- To have tendency to commit suicide (Rogers et al et al 2010, Swann et al 2005 )

Helz et al (1991) concluded that about 5/4 percent of the mania patients are alcoholism and about 1/6 percent of them are depressed. Moreover, 10/7 percent of the mania patients and 3/6 percent of depressed persons use extremely drugs (Gershon et al 1982 ). Evidences show that about %37 of the alcoholic persons and drug addicts have not been remedied (Regier et al 1990 ).

There are some hypotheses relative to the relation between mania and the decrease of alcohol response level. Therefore, it is necessary to present more cases for achieving efficient response . This is to say that it causes affiliation syndrom.

Neurobiologic tests confirm such hypothesis. In reality , discordance of reward system supports the above mentioned hypothesis (Hinckers et al 2006 ).

Despite the high incidence of the disorder and the relation between it and drugs misuse and neurobiologic disorders, there is no evidence to support such hypothesis. Moreover, evidences show that bipolar disorder takes root of frontal and limbic parts of the brain (Soares et al 2005 ). Furthermore , about %96 of the patients use extremely drugs (Weiss et al 2004 ).

The bipolar disorder involves much expenses for the patients and affects on their ability (Havermans et al 2007 ). In reality , the functional damage arising from the disorder appears during the depression and mania episode (Bauer et al 2006 ). In other words, bipolar disorder is an unabling psychological disorder which appears during some unpredictable episode and involves much expenses (Gershon et al 1997). Moreover, bipolar disorder entails many clinical consequences including sever depression. The patients consume alcohol and other drugs. In other words, such consequences should be mentioned during the treatment (Sherwood Brown et al 2001 ). Since both bipolar disorder and misuse of alcohol entail similar symptoms, the bipolar persons may be mistaken for consuming drugs. Regarding the influence of drug use on the symptoms of bipolar disorder and treatment procedure and because of the importance of the above mentioned , this study is aimed to investigate the prevalence of consuming drugs and related consequences in the patients of Tehran's Rusbeh hospital.

## 2- method

This is a descriptive – sectional study in which 100 patients who have been confined to bed at Rusbeh hospital in 2012 are examined using simple (available)sampling method. The samples were selected based on the previous studies and ratio estimation formula (incidence of disorder = %65, proportional accuracy = %25, reliability = %95). From the beginning of Feb.2012 , 100 bipolar patients were examined by the MA students of clinical psychology and the related questionnaire was completed due to the gathered data and clinical interviews based on the DSM –IV diagnostic criterions. The needed information relative to the type and duration of use and demographic characteristics was achieved from the patients' files. Data was gathered using SPSS software and then was analyzed. The credibility of the variables was calculated with the help of designed graphs and tables. In order to determine the relation between the variables, the t – test , K – square test and correlation coefficient test was used.

## 3- conclusion

About 100 patients were studied from whom 55 ones were male and others were female. %68 of them were unmarried. The average of the patients ages was 33. The subjectives were 15-30 years old (%50). About %37 of them were the first child of the family, %16 were the second child, %25 were the third child and %22 were the smallest child of the family. 25 out of the 100 patients were employed and 75 ones are unemployed. The subjects were confined to bed between 1-10 times. %17 of the patients had been confined to bed for the first time and %76 had been confined to bed less than 5 times.

%25 of the patients were uneducated , %49 were below diploma, %18 were diploma and associate of arts and %8 were B.A. due to their family record, %57 had a record of bipolar disorder. %31 of the subjects had fallen sick before 15 years of age. %51 had fallen sick at the age of 16-31. %16 had became ill between the ages of 32-47 and only %1 had became ill at the age of 48 (table.1).

About %58 consumed such drugs and %39 was costumed to consume between 1-10 years. About %66/3 consumed various drugs and %33/7 consumed only one drug ( alcohol %37/21, glass %19/49 , bhng %14/24 , crack %9/54, opium %19/49). Furthermore, about %57 of the patients have the family record of this disorder. The patients' average time of drug use was 9.

Table 1. Demographic characteristic of the patients being confined to bed in Tehran's Rusbeh hospital

Variables	Number	Percent
<b>Gender</b>		
Male	55	55
Female	45	45
<b>Marriage</b>		
Married	38	38
Male	19	50
Female	19	50
Single	62	62
Male	36	58
Female	26	42
<b>Age</b>		
15-30	50	50
31-46	34	34
47-62	14	14
63-78	2	2
<b>Birth order</b>		
First child	37	37
Second child	16	16
Midle child	25	25
The last child	22	22
<b>Job</b>		
Employed	25	25
Unemployed	75	75
<b>Period of being confined to bed</b>		
1-5	76	76
6-10	23	23
<b>Education</b>		
Illiterate	25	25
Below diploma	49	49
Diploma and associated of art	18	18
B.A and upper	8	8
<b>Family record</b>		
Yes	57	57
No	43	43
<b>Use of drug record</b>		
Yes	58	58
No	42	42

About %72 of the patients were male and %28 female. %85 of them was unemployed (Table.2). Moreover, %57 of the unemployed persons and %60 of the employed ones consumed drugs.

Table 2. Demographic characteristics of bipolar patients who consumed drugs

Variables	Number	Percent
Gender		
Male	42	72
Female	17	28
Age of drug use		
10-20	26	26
21-31	17	17
32-42	12	12
43-53	3	3
Job		
Employed	15	25/86
Unemployed	42	74/13
Duration of drug use		
1-5	23	23
6-10	16	16
11-15	18	18
16-20	11	11

Results show that there is a meaningful relationship between gender and factors such as the kind of drug, employment and family record ( $p < 0.05$ ). On the other hand, there is no relationship between gender, birth order, education, the period of being confined to bed, person's age, the age of appearance of illness, use time and marriage condition ( $p > 0.05$ ).

From the results, it becomes clear that there is a relationship between the period of being confined to bed and the factors such as the period of consuming drugs, the age of initiation of consuming drugs and the age of initiation of consuming drugs and the age of persons ( $p < 0.05$ ). But there is no relationship between the period of being confined to bed and the factors such as the age of appearance of the disorder, gender, marriage, family record, birth order, the kind of drug and employment ( $p > 0.05$ ). About 75% of the patients were confined to bed less than 5 times and only 25% were confined to bed between 6-10 times.

Results show that there is a meaningful relationship between gender and the kind of consumed drug ( $p < 0.05$ ). About 35% of women and 76% of men were respectively addicted to drugs such as glass (66/9) and alcohol (51/1).

#### 4- Discussion

Evidences show that the persons with the ages of 15-44 years suffer from the misconception of alcohol and drugs (Hirschfeld et al 2000). In one study about 52 bipolar patients, it became clear that 48% of them were addicted to Marijuana (Schulberg et

al 1995). The result of both studies was similar to the results of the current study.

Results revealed that 58% of the patients suffered from misuse of drug. About 66/3 of them consumed several drugs and 33/7 consumed only one kind of drugs. In their study about 25 bipolar patients, Swan et al (1994) concluded that about 96% of them consumed drugs and alcohol for being good-natured.

In reality, 38% of them drank alcohol in order to decrease the symptoms of mania and 13% of them consumed cocaine in order to improve their depression (Regier et al 1990). Evidences also show that there is a relationship between bipolar disorder and addiction to alcohol (Law et al 1999). Moreover, about 22 – 30 percent of the patients were addicted to crack (Frye & Salloum 2006). Furthermore, most of the patients (33-46%) suffer from alcohol misuse (McElroy et al 2001, Regier et al 1990). About 61% of the patients consume drugs such as alcohol, Marijuana, cocaine and morphine (González-Pinto et al, 2010). Recent studies have revealed that 46% of the healthy ones drink alcohol (Sherwood Brown et al 2001). Vest et al (1996) concluded that 40% of bipolar patients suffer from misuse of drugs (Wilens et al 2008). Another study showed that there is a direct relation between the use of cannabis and mania episode (González-Pinto et al 2010). Moreover, there is a direct relationship between bipolar disorder and misuse of alcohol and cannabis (Mulder et al 1994).

Due to the recent studies, 46 percent of the bipolar patients are addicted to alcohol. On the other

hand, only %14 of the healthy ones drinks alcohol (Sherwood Brown et al 2001 ).

Vest et al (1996) reported that 40 percent of the bipolar patients are suffering from misuse of drugs (Wilens et al 2008 ). moreover, there is a relation between the use of cannabis and mania episode (30). There is a relation between misuse of alcohol and misuse of cannabis (31). Evidences show that there is a relationship between misuse of alcohol and bipolar disorder (2-9%)( Arendt & Munk-Jørgensen 2004). Gold et al (1982) concluded that about 7% of the persons are suffering from hypomania (Carroll et al 1993). In other words, the drugs such as alcohol and crack have a little influence on the treatment (Yen 1980).

The results of the current study show that about %75 and %36 of the males and females are respectively addicted to the drugs. Alcohol is the most used one which the men are addicted to. Albeniz et al (2006 ) revealed that %29 of the subjects who have misuse of drugs are suffering from bipolar disorder and about half of them receive no treatment (Akiskal 2006). Therefore, this is to say that the men are addicted to drinking alcohol more than the women.

Results also show that %31 of the youth suffer from misuse of the drugs. Perlis et al (2006) studied about 1000 bipolar patients using STEP – BD program and concluded that there may be a relationship between misuse of the drug and the appearance of bipolar disorder during the childhood period ( below 18 years old)( Wilens 2008 ). Another study showed that the appearance of bipolar disorder before the age of 21 may be followed the misuse of alcohol. Moreover, there is a relationship between physical power and bipolar disorder (Wilens et al 2008, West et al 1996 ). Evidences show that in comparison with the childhood period, the appearance of bipolar disorder at the adolescence can be increased by using drugs (p=%1)(who 2005). Strobes et al (1995) reported that about %22 of the bipolar adolescents suffer from misuse of drug after being confined to bed.

Furthermore, there is a relationship between the age of suffering from the disorder and the danger of misuse of the drugs (Wilens et al 2008 ). In reality, the results of their study are similar to the results of the current study. Before studies have shown that the adolescent's' bipolar disorder is the main reason for using drugs (Wilens et al 2000 ).

There is a direct relationship between the age of being suffered from bipolar disorder and family record (p<05). Moreover, there is a direct relation between gender, kind of drug and family record (p<05). Results of a study about 110 patients showed that misuse drugs and alcohol is affected by factors such as genetics and environment (Wang et al 2004 ). In fact, the results of the above mentioned studies are

similar to the results of this study (Winokur et al 1993 ).

Our study showed that the women use mostly glass and the men use alcohol, morphine and crack, respectively. This is worth noting that there are some other drugs used by the patients, including cannabis, heroin and marijuana. Some other studies have shown that cannabis is the drug used mostly by the patients. On the other hand, there is a relationship between misuse of alcohol and depression disorder. Moreover, misuse of cannabis is correlated with the development of mania episode. Results show that there is no difference between the duration of mania and depression episode and misuse of alcohol (p=%56, %35, %43/2, %43/2) (González-Pinto et al 2010 ). Evidences show that schizophrenic persons use always cannabis (Arendt & Munk-Jørgensen 2004).

Recognition of mental disorders followed by addiction may help the physicians to treat the addicts. For example, depression is known as the simplest behavioral change of the patients. Depression is the main illness among the addicts (Kaech et al 2003 ). In sum, addiction is accompanied with some mental disorders (Qureshi et al 2002). The symptoms of bipolar disorder include some shocking behaviors, misuse of drugs, unstable morality, sleep disorder, increase of energy and legal problems. The unstable morality is considered the main problem influencing on the psychological health of the persons (Frye et al 2005 ). Use of drugs causes the persons to suffer from the disorder. It increases the periods of being confined to bed, infectious illnesses, harshness, vagrancy and poor response to the treatment. Use of drugs involves many expenses for the patient, family and health system.

Since the data was gathered by use of the patients' files, it is necessary to say that some parts of data may be incorrect. This study was aimed to investigate the epidemic affect of drugs use. Because the study lacks the control group, it is necessary to study the influence of drug use on the duration and symptoms of the disorder in future.

## Appendix

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## References

- 1- Rehm J, Rehm J, Taylor B, Rehm J, Taylor B, Room R, et al. (2006), Global burden of disease from alcohol, illicit drugs and tobacco. Drug and alcohol review. 25(6):13-503
- 2-Sherwood Brown E, Suppes T, Adinoff B, Rajan Thomas N.(2001), Drug abuse and bipolar

- disorder: comorbidity or misdiagnosis? *Journal of Affective Disorders*. 65(2):15-105
- 3- Liu RT.(2010), Early life stressors and genetic influences on the development of bipolar disorder: the roles of childhood abuse and brain-derived neurotrophic factor. *Child abuse & neglect*, 34(7):22-516
  - 4- Maremmani I, Perugi G, Pacini M, Akiskal HS.(2006), Toward a unitary perspective on the bipolar spectrum and substance abuse: opiate addiction as a paradigm. *Journal of affective disorders*. 93(1):12-1
  - 5- Sadock B, Sadock V. (2003), Psychological factors affecting medical condition and psychosomatic medicine. Kaplan and Sadock's *Synopsis of Psychiatry 9th ed Philadelphia*: Lippincott Williams & Wilkins. P35-822.
  - 6-Bauer M, Pfennig A. (2005). Epidemiology of bipolar disorders. *Epilepsia*.,13-46
  - 7- Kessler RC, Chiu WT, Demler O, Walters EE. (2005), Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*. 62(6):617
  - 8- Weiss RD, Kolodziej M, Griffin ML, Najavits LM, Jacobson LM, Greenfield SF. (2004). Substance use and perceived symptom improvement among patients with bipolar disorder and substance dependence. *Journal of affective disorders*. 79(1)- 83-279.
  - 9- De Hert M, Wampers M, Jendricko T ,Francic T, Vidovic D, De Vriendt N, et al. (2011) Effects of cannabis use on age at onset in schizophrenia and bipolar disorder. *Schizophrenia research*.126(1):6-27.
  - 10- by Young SA. (1987) Adult Chronic Patients. *Hospital and Community Psychiatry*. 38(5):511.
  - 11- Comtois KA, Russo JE, Roy-Byrne P, Ries RK. (2004) Clinicians' assessments of bipolar disorder and substance abuse as predictors of suicidal behavior in acutely hospitalized psychiatric inpatients. *Biological Psychiatry*. 56(10):.63-757
  - 12 Tsai SY, Lee HC, Chen CC, Huang YL. (2007) Cognitive impairment in later life in patients with early-onset bipolar disorder. *Bipolar disorders*. 9(8):.75-868
  - 13 Cardoso BM, Kauer Sant'Anna M, Dias VV, Andreatza AC, Ceresér KM, Kapczynski F. (2008) The impact of co-morbid alcohol use disorder in bipolar patients. *Alcohol*.42(6):-451 .7
  - 14 Rogers RD, Moeller FG, Swann AC, Clark L. (2010) Recent research on impulsivity in individuals with drug use and mental health disorders: Implications for alcoholism. *Alcoholism: Clinical and Experimental Research*. 34(8):.33-1319
  - 15 Swann AC, Dougherty DM, Pazzaglia PJ, Pham M, Steinberg JL, Moeller FG. . (2005) Increased impulsivity associated with severity of suicide attempt history in patients with bipolar disorder. *American Journal of Psychiatry*. 162(9):.7-1680
  - 16 Gershon ES, Hamovit J, Guroff JJ, Dibble E, Leckman JF, Sceery W, et al. (1982) A family study of schizoaffective, bipolar I, bipolar II, unipolar, and normal control probands. *Archives of General Psychiatry*..39(10):.1157
  - 17 Regier DA, Farmer ME, Rae DS, Locke BZ, Keith SJ, Judd LL, et al. (1990) Comorbidity of mental disorders with alcohol and other drug abuse. *JAMA: the journal of the American Medical Association*.264(19):.8-2511
  - 18 Hinckers AS, Laucht M, Schmidt MH, Mann KF ,Schumann G, Schuckit MA, et al (2006 ) Low level of response to alcohol as associated with serotonin transporter genotype and high alcohol intake in adolescents. *Biological psychiatry*.60(3):.7-282
  - 19 Soares JC, Kochunov P, Monkul ES, Nicoletti MA, Brambilla P, Sassi RB, et al (2005 ) Structural brain changes in bipolar disorder using deformation field morphometry. *Neuroreport*.16(6):.4-541
  - 20 Havermans R, Nicolson NA (2007). Daily hassles, uplifts, and time use in individuals with bipolar disorder in remission .*The Journal of nervous and mental disease*.195(9):.51-745
  - 21 Bauer M, McBride L, Williford W, Glick H, Kinosian B, Altshuler L, et al. (2006) Collaborative care for bipolar disorder: Part II. Impact on clinical outcome, function, and costs. *Psychiatric Services*.57(7):.45-937
  - 22 Gershon S, Soares JC (1997 ) Current therapeutic profile of lithium. *Archives of general psychiatry*.54(1):.16
  - 23 Hirschfeld RM, Williams JB, Spitzer RL, Calabrese JR, Flynn L, Keck PE, et al. (2000) Development and validation of a screening instrument for bipolar spectrum disorder: the Mood Disorder Questionnaire. *American Journal of Psychiatry*.157(11):.5-1873
  - 24 Schulberg HC, Madonia MJ, Block MR, Coulehan JL, Scott CP, Rodriguez E, et al. (1995) Major depression in primary care practice: clinical characteristics and treatment implications. *Psychosomatics*.36(2):.37-129
  - 25 Law M, Wald N, Stampfer M, Rimm E, Barker D, Mackenbach JP, et al. (1999) Why heart disease mortality is low in France: the time lag

- explanation  
Commentary: Alcohol and other dietary factors may be important  
Commentary: Intrauterine nutrition may be important  
Commentary: Heterogeneity of populations should be taken into account  
Authors' response. *BMJ*.318(7196):.80-1471
- .26 Frye MA, Salloum IM. (2006) Bipolar disorder and comorbid alcoholism: prevalence rate and treatment considerations. *Bipolar disorders*. 8(6):.85-677
- .27 McElroy SL, Altshuler LL, Suppes T, Keck PE, Frye MA, Denicoff KD, et al. (2001) Axis I psychiatric comorbidity and its relationship to historical illness variables in 288 patients with bipolar disorder. *American Journal of Psychiatry*. 158(3):.6-420
- .28 González-Pinto A, Alberich S, Barbeito S, Alonso M, Vieta E, Martínez-Arán A, et al. . (2010) Different profile of substance abuse in relation to predominant polarity in bipolar disorder: The Vitoria long-term follow-up study. *Journal of affective disorders*. 124(3):.250
- .29 Wilens TE, Biederman J, Adamson JJ, Henin A, Sgambati S, Gignac M, et al. (2008) Further evidence of an association between adolescent bipolar disorder with smoking and substance use disorders: a controlled study. *Drug and alcohol dependence*.95(3):.98-188
- .30 González-Pinto A, Alberich S, Barbeito S, Alonso M, Vieta E, Martínez-Arán A, et al. (2010) Different profile of substance abuse in relation to predominant polarity in bipolar disorder: the Vitoria long-term follow-up study. *Journal of affective disorders*.124(3):.5-250
- .31 Mulder RT, Joyce PR, Cloninger CR. (1994) Temperament and early environment influence comorbidity and personality disorders in major depression. *Comprehensive psychiatry*. 35(3):.33-225
- .32 Arendt M, Munk-Jørgensen P. (2004) Heavy cannabis users seeking treatment. *Social psychiatry and psychiatric epidemiology*. 39(2):.105-97
- .33 Carroll KM, Power M-ED, Bryant K, ROUNSAVILLE BJ. (1993) One-year follow-up status of treatment-seeking cocaine abusers: psychopathology and dependence severity as predictors of outcome. *The Journal of nervous and mental disease*.181(2):.9-71
- .34 Yen S. Review article: (1980) The polycystic ovary syndrome. *Clinical endocrinology*. 12(2):.208-177
- .35 Akiskal HS. (2006) The scope of bipolar disorders. *Bipolar Psychopharmacotherapy: Caring for the Patient West Sussex, England, Wiley*.8-1:
- .36 West SA, Strakowski SM, Sax KW, McElroy SL, Keck Jr PE, McConville BJ.(1996 ) Phenomenology and comorbidity of adolescents hospitalized for the treatment of acute mania. *Biological psychiatry*.39(6):.458
- .37 Health WHODoM, Abuse S. Mental health atlas: (2005): World Health Organization;.
- .38 Wilens TE, Biederman J, Milberger S, Haheys AL, Goldman S, Wozniak J, et al. (2000) Is bipolar disorder a risk for cigarette smoking in ADHD youth? *The American Journal on Addictions*.9(3):.95-187
- .39 Stinson FS, Ruan WJ, Pickering R, Grant BF. (2006) Cannabis use disorders in the USA : prevalence, correlates and co-morbidity. *Psychological Medicine*.36(10):.60-1447
- .40 Wang JC, Hinrichs AL, Stock H, Budde J, Allen R, Bertelsen S, et al. (2004) Evidence of common and specific genetic effects: association of the muscarinic acetylcholine receptor M 2(CHRM2) gene with alcohol dependence and major depressive syndrome. *Human Molecular Genetics*.13(17):.11-1903
- .41 Winokur G, Cook B, Liskow B, Fowler R. (1993) Alcoholism in manic depressive (bipolar) patients. *Journal of Studies on Alcohol and Drugs*;.54(5):.574
- .42 Kaeck SM, Tan JT, Wherry EJ, Konieczny BT, Surh CD, Ahmed R. (2003) Selective expression of the interleukin 7receptor identifies effector CD 8T cells that give rise to long-lived memory cells. *Nature immunology*. 4(12):.8-1191
- .43 Quraish Zs, Torabi K, Pt University .(2002)Of mental illness combined with drug addiction in 200 patients referred to our center represents Tabriz
- .44 Frye MA, Calabrese JR, Reed ML, Wagner KD, Lewis L, McNulty J, et al. (2005) Use of health care services among persons who screen positive for bipolar disorder. *Psychiatric Services*. 56(12):.33-1529