

Combination of analgesics (NSAIDS), baclofen, clonidine and a single dose of buprenorphine for heroin detoxification

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Abstract

Background: Heroin dependency is currently an alarming problem.

Objective: To investigate the efficacy of combination of analgesics (NSAIDS), baclofen, clonidine and a single high dose of buprenorphine in heroin detoxification.

Results: Administration of combination of, baclofen 75 mg, clonidine 0.2 mg, ibuprofen 1200 mg and a single 57 mg of buprenorphine is very effective for detoxification of heroin dependence.

Discussion: This study clarifies that a combination of analgesics (NSAIDS), baclofen, clonidine and a single high dose of buprenorphine is quite helpful in the management of heroin withdrawal symptoms. Hence, our study may be a substantial addition to the literature.

Conclusions: We resulted that a combination of analgesics (NSAIDS), baclofen, clonidine and a single high dose of buprenorphine is very helpful in the detoxification of heroin withdrawal symptoms.

Key words: Baclofen; Clonidine; Ibuprofen; Buprenorphine; Heroin withdrawals

1. Introduction.

The United State Food and Drug Administration approved buprenorphine for heroin detoxification (1).

Buprenorphine is a partial mu receptor agonist; so has low possibility of overdose and toxicity (2).

Published reports, comparing buprenorphine with methadone, illustrated that buprenorphine is more efficacious than methadone (3, 4, 5). Johnson, Jaffe, and Fudala in a report uncovered that 8 mg of buprenorphine is comparable to 60 mg of methadone considering rates of retention and opioid negative urines (6).

Buprenorphine decreases the incidence of HIV and other associated disorders resulting from opioids consumption (2, 7, and 8).

Heroin is synthesized from opium and is an opioid mu receptor agonist. Heroin as earlier was supposed as a non-addictive form of morphine (1).

Since many years ago, people have been smoking or ingesting opium for different intentions such as fun or medication (9, 10).

Not only in developing countries but also in developed regions, medical and mental problems are going up (11-29). Focusing on mental problems, substance linked disorders, have been considered as a moving up universally dilemma.

As a raising problem, opioids and amphetamines induced mental disorders have resulted more referrals to substance abuse centers (30-107).

Now, we would like to report successful heroin detoxification of a patient using a combination of buprenorphine, baclofen, clonidine and ibuprofen.

We could not find enough reports on this title, so the current study might add to the literature.

Patient picture

Currently we are going to portray a patient with heroin dependence that responded successfully to a combination of analgesics (NSAIDS), baclofen, clonidine and a single dose of buprenorphine for detoxification of heroin dependence

FT was a married 25 years old skilled worker with college education. He lived with his family in Marvdasht city of Fars province in southern Iran.

FT had been abusing tramadol tablets since 2 years prior to admission. He bit by bit increased the dosage to 1000 mg/d and developed a few episodes of convulsions.

Since 2 months prior to admission he stopped abusing of tramadol and began smoking heroin.

After tramadol abuse he gradually developed depressed mood, anxiety, irritability, insomnia, hopelessness and low appetite. One week prior to admission his symptoms were exaggerated and was directed to this hospital.

Due to irritability, depression, insomnia, low appetite and vomiting he was admitted in psychiatric ward.

During precise psychiatric interview and mental status examination he was depressed, anxious and irritable. In complete physical and neurological examinations we could not find, any significant abnormal signs and symptoms.

Urine drug screening tests were positive for morphine and methadone only. Viral markers tests (HIV, HCV and HB Ag) were normal.

With reference to medical, psychiatric, and substance use history and DSM-5 criteria he was diagnosed as “opioid related depressive disorder, and opioid dependence.

In hospital admission, we administered olanzapine 10 mg, valproate 1000 mg, and melatonin 6 mg per day for the treatment of low appetite, depression, irritability and insomnia.

In the 2nd day of admission he complained of opioid withdrawals, hence, he received 57 mg of sublingual buprenorphine as a single dose only.

Based on close monitoring and interview (3 times a day) for heroin withdrawal pain and craving, **he experienced a very low level of pain and craving after receiving 57 mg of buprenorphine.**

In the 6th day of admission, he again developed opioid withdrawal symptoms; therefore, we administered baclofen 75 mg, clonidine 0.2 mg and ibuprofen 1200 mg per day.

With reference to 3 times per day of observation and interview, **FT experienced and reported a low level of opioid withdrawals after receiving ibuprofen, baclofen and clonidine.**

After 12 days of hospital admission he was discharged without any significant heroin withdrawal symptoms.

Discussion

Iranian health authorities announce that if someone is found to be abusing illicit substances or drugs, such as, opioids, hashish, marijuana, alcohol, ecstasy, methamphetamine, hallucinogens and cocaine, he/she must be referred to addiction treatment centers to be under treatment.

Our study illuminates that a combination of **analgesics (NSAIDS), baclofen, clonidine and a single high dose of buprenorphine** is quite effective in the management of heroin withdrawal symptoms. So, the present study may be a substantial addition to the literature.

Conclusions

We conclude that a combination of **analgesics (NSAIDS), baclofen, clonidine and a single high dose of buprenorphine** is quite helpful for the detoxification of heroin withdrawal symptoms.

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References:

- [1] Sadock, B., Sadock, V., Ruiz. P. (Editors) Kaplan & Sadock's Synopsis of Psychiatry: Lippincott Williams and Wilkins, Philadelphia (USA), 2015.
- [2] Jasinski, D. R., Pevnick, J. S., & Griffith, J. D... Human pharmacology and abuse potential of the analgesic buprenorphine: a potential agent for treating narcotic addiction. Archives of General Psychiatry, (1978) 35, 501–516.
- [3] Ling, W., Charuvastra, C., Collins, J. F., Batki, S., Brown, L. S. Jr., Kintaudi, P., Wesson, D. R., McNicholas, L., Tusel, D. J., Malkerkeker, U., Renner, J. A. Jr., Santos, E., Casadonte, P., Fye, C., Stine, S., Wang, R. I., & Segal, D.. Buprenorphine maintenance treatment of opiate dependence: a multicenter, randomized clinical trial. Addiction, (1998) 93, 475–486.
- [4] Ling, W., Rawson, R. A., & Compton, M. A. Substitution pharmacotherapies for opioid addiction: from methadone to LAAM and buprenorphine. Journal of Psychoactive Drugs, (1994) 26, 119–128.
- [5] Strain, E. C., Stitzer, M. L., Liebson, I. A., & Bigelow, G. E. Comparison of buprenorphine and methadone in the treatment of opioid dependence. American Journal of Psychiatry, (1994). 151, 1025–1030.
- [6] Johnson, R. E., Jaffe, J. H., & Fudala, P. J. A controlled trial of buprenorphine treatment for opioid dependence. Journal of the American Medical Association, (1992), 267, 2750–2755.
- [7] Lewis, J. W. Buprenorphine. Drug and Alcohol Dependence, (1985), 14, 363–372.
- [8] Jasinski, D. R., Fudala, P. J., & Johnson, R. E. Sublingual versus subcutaneous buprenorphine in opiate abusers. Clinical Pharmacology and Therapeutics, (1989). 45, 513–519.
- [9] Brian, J. Opium and infant-sedation in 19th century England, Health Visitor, 1994; 76, 165-166.
- [10] Jonnes, J. The rise of the modern addict, American Journal of public Health, 1995; 85, 1157-1162.
- [11] Gill D, Ahmadi J, Pridmore S, Suicide and Gambling on the Public Record. MJP. 2014; 2 (1): 81-88
- [12] Ahmadi J, Kamel M, Ahmed MG, Bayoumi FA, Moneenum A. Mental Health of Dubai Medical College Students. Iran J Psychiatry Behave Sci. 2012; 6(2): 79-83.
- [13] Ahmadi J, Kamel M, Ahmed MG, Bayoumi FA, Moneenum AA. Dubai Medical College students' scores on the Beck Depression Inventory. Iranian Red Crescent Journal (IRCMJ). 2008; 10(3):169-172
- [14] Pridmore S, McInerney G, Ahmadi, Rybak M. Enlarged Virchow-Robin Spaces in a psychotic woman, Journal of Psychiatric Intensive Care (2007) 3: 49-54
- [15] Pridmore S, Robinson J, Ahmadi J. Suicide for scrutinizers. Australas Psychiatry. 2007 Jun; 15 (3): 247-8.

- [16] Ghanizadeh A, Kianpoor M, Rezaei M, Rezaei H, Moini R, Aghakhani K, Ahmadi J, Moeini SR. Sleep patterns and habits in high school Students in Iran. *Ann Gen Psychiatry*. 2008 Mar 13; 7:5.
- [17] Ghanizadeh A, Arkan N, Mohammadi MR, Ghanizadeh-Zarchi MA, Ahmadi J. Frequency of and barriers to utilization of mental health services in an Iranian population. *East Mediterr Health J*. 2008 Mar-Apr; 14(2):438-46
- [18] Pridmore S, Ahmadi J, Two cases of 'Type 3' suicide. *Australasian Psychiatry*. 2010, Vol 18, No 5: 426-430
- [19] Pridmore S, Brüne M, Ahmadi J, Dale J. Echopraxia in schizophrenia: Possible mechanisms. *Aust N Z J Psychiatry*. 2008, Jul; 42(7):565-71.
- [20] Pridmore S, Ahmadi J, Reddy A. Suicide in the absence of mental disorder. Working paper of public health. 2012, 6, 1-11
- [21] Pridmore S, Ahmadi J, Majeed ZA. Suicide in Old Norse and Finnish Folk stories. *Australasian Psychiatry*. 2011, Vol 19, No 4:322-324
- [22] Pridmore S, Ahmadi J, Usage of download of psychiatry by Muslim Countries. *Bulletin of clinical psychopharmacology*. 2011, Vol 21, No 2: 174
- [23] Mani A, Dastgheib SA, Chanoor A, Khalili HA, Ahmadzadeh L, Ahmadi J, Sleep Quality among Patients with Mild Traumatic Brain Injury: A Cross-Sectional Study. *Bull Emerg Trauma*. 2015; 3(3): 93-96.
- [24] Pridmore S, Ahmadi J; Psalm 137 and Middle Cerebral Artery Infarction; *ASEAN Journal of Psychiatry*, 2015; 16 (2).
- [25] Pridmore S, Ahmadi J. Book reviews. *Aust N Z J Psychiatry*, 39(3): 205-6, 2005.
- [26] Pridmore S, Ahmadi J, Evenhuis M. Suicide for scrutinizers. *Australas Psychiatry*. 2006 Dec; 14(4):359-64.
- [27] Ahmadi J, Ahmadi N, Soltani F, Bayat F. Gender differences in depression Scores of Iranian and German medical students. *Iran J Psychiatry Behav Sci* 2014; 8(4): 70-73
- [28] Mackay-Smith M, Ahmadi J; Pridmore S, Suicide in Shooting Galleries *ASEAN Journal of Psychiatry*, Vol. 16 (1), January - June 2015: 50-56
- [29] Khademalhosseini Z, Ahmadi J, Khademalhosseini M, Prevalence of Smoking, and its Relationship with Depression, and Anxiety in a Sample of Iranian High School Students. *Enliven: Pharmacovigil Drug Saf*. 2015; 1(1):005.
- [30] Ahmadi J, Ghafoori M, Rahimi S, Management of heroin addiction with baclofen and clonidine. *Int J Res Rep* 2015; 1(1):6-10.
- [31] Ahmadi J, Sahraian A, Shariati S, Homicidal patient with major depressive disorder companion with opium dependence: A new arcade. *Int J Res Rep* 2015; 1(1):1-5
- [32] Ahmadi, J. Heroin Dependency Treatment: A New Approach. *J Addict Depend* 2015; 1(2): 1-3.
- [33] Ahmadi J Hashish-Induced Olfactory Hallucination: A Novel Finding. *J Psychiatry*, 2015; 18:330. doi:10.4172/2378-5756.1000330
- [34] Ahmadi, J. Excellent Outcome of Psychosis Induced by Methamphetamine Intoxication after 20 Sessions of Electro Convulsive Therapy. *J Addict Depend* 2015 1(2): 1- 2.
- [35] Ahmadi J, Ekramzadeh S, Pridmore S, Remission of Methamphetamine- Induced Withdrawal Delirium and Craving after Electroconvulsive Therapy *Iran J Psychiatry Behav Sci*. 2015 December; 9(4):e1793.
- [36] Ahmadi J, Sahraian A, Dastgheib SA, Moghimi E, Bazrafshan A, Treatment of heroin abuse. *Sch. Acad. J. Biosci.*, 2015; 3(11):966-968
- [37] Ahmadi J, Sahraian A, Dastgheib SA, Mani A, Mowla A, Ahmadzadeh L, ECT and methamphetamine psychosis: *IJMPs.*, 2015; 7(1): 51-53
- [38] Ahmadi J Tramadol Dependency Treatment: A New Approach. *J Addict Med Ther Sci.*, 2015; 2(1): 001-03.
- [39] Ahmadi J, Dehghanian I, Razeghian Jahromi L. Poly substance induced psychosis *Sch. J. App. Med. Sci.*, 2015; 3(7D):2693-2695
- [40] Ahmadi J, Dehghanian I, Razeghian Jahromi L., Substance induced disorder. *Sch. J. App. Med. Sci.*, 2015; 3(7D):2700-2703
- [41] Ahmadi J, Pridmore S, Ekramzadeh S, Successful Use Of Electro Convulsive Therapy in The Management Of Methamphetamine Induced Psychosis With Onset During Intoxication. *J Addict & Depend*, 2015; 1, 1-3
- [42] Ahmadi J. The Effect of Buprenorphine and Bupropion in the Treatment of Methamphetamine Dependency and Craving. *Br J Med & Med Res* 2015; 10 (2): 1-4
- [43] Ahmadi J, Sahraian A, Dastgheib SA, Mowla A, Ahmadzadeh L Management of Methamphetamine-Induced Psychosis by 8 sessions of ECT *Sch.J. App. Med. Sci.*, 2015; 3 (3H):1565-1566.
- [44] Ahmadi J, Amir A, Ghanizadeh A, Khademalhosseini M, Khademalhosseini Z, Thalami Z et al . Prevalence of Addiction to the Internet, Computer Games, DVD, and Video and Its Relationship to Anxiety and Depression in a Sample of Iranian High School Students. *Iran J Psychiatry Behav Sci*. 2014; 8 (2):75-80
- [45] Ahmadi J, Soltani F, Tabatabaee F, et al., Substance Use Disorders in Patients With Lung or Heart Diseases. *Sch. J. App. Med. Sci.*, 2014; 2(1A):111-120
- [46] Ahmadi J, Sharifi M Lifetime and Current Prevalence of Tobacco Smoking. *J. Addict Res Ther* 2013; 4: 145. doi:10.4172/2155-6105.1000145
- [47] Ahmadi J, Ahmed MG. Dubai Medical College Students' Attitudes towards Substance Use. *J Addict Res Ther* (2013) S6: 005. doi:10.4172/2155-6105.S6
- [48] Ahmadi J, Keshtkar M, Pridmore S. Methamphetamine Induced Synesthesia A Case Report. *Am J Addict*. 2011; 20: 306
- [49] Ahmadi J, Naghshvarian M, Afshari R. Opioid abuse in male population referred for mandatory Urine Opioid Screen before marriage in Shiraz-Iran. *Iranian J Psychiatry Behav Sci*. 2011; 5(2): 126-30.
- [50] Ahmadi J, Kampman K, Osline DM. et al, Predictors of Treatment Outcome in Outpatient Cocaine and Alcohol Dependence Treatment. *Am J Addict*. 2009; 18:81-86
- [51] Ahmadi J, Benrazavi L, Babaebeigi M, Ghanizadeh A, Ghanizadeh M, Pridmore S. Substance use in a sample of medical patients. *J Psychoactive Drugs*. 2008 Sep; 40(3):315-9.
- [52] Ahmadi J, Kampman K, Dackis C, Sparkman T, Pettinati H Cocaine withdrawal Symptoms identify Type B cocaine-dependent patients. *Am J Addict*. 2008; 17 (1): 60-64.
- [53] Ahmadi J, Pridmore S, Alimi, A, et al., Epidemiology of Opium Use in the General Population. *Am. J. Drug and Alcohol Abuse*, 2007; 33: 483-491.
- [54] Ahmadi J, Kampman K, Dackis C. Outcome predictors in cocaine dependence treatment trials. *Am J Addict*. 2006 Nov-Dec; 15 (6):434-9.
- [55] Tabei SZ, Heydari ST, Mehrabani D, Shamsina SJ, Ahmadi J, Firouzi SM Current substance use in patients with gastric cancer in Southern Iran. *J Can Res Ther* 2006; 2:182-185
- [56] Ahmadi J, Fallahzadeh H, Salimi A, Rahimian M, Salehi V, Khaghani M, Babaebeigi M. Analysis of opium use by students of medical sciences. *J Clin Nurs*. 2006 Apr; 15(4):379-86.
- [57] Ahmadi J, Tabatabaee F, Gozin Z. Physical trauma and substance abuse: a comparative study on substance abuse in patients with physical trauma versus general population. *J Addict Dis*. 2006; 25(1):51-63.
- [58] Ahmadi, J., Ahmadi, M., Pridmore, S., et al., Substance Use Disorders in Rheumatic Patients. *German J Psychiatry*. 2005; 5 (8): 66-9.

- [59] Ahmadi, J., Menzies, P., Maany, I., et al., Pattern of cocaine and heroin abuse in a sample of Iranian general population. *German J Psychiatry*. 8 (1): 1-4. 2005
- [60] Ahmadi, J., Farrashbandi, H., Menzies, P et al., Prevalence of mood and anxiety disorders in a sample of Iranian outpatient opioid addicts. *German J Psychiatry*. 8 (1): 5-7. 2005.
- [61] Ahmadi, J., Farrashbandi, H., Majdi, B., et al., Substance-induced anxiety disorder in opioid dependents. *Addictive Disorders & Their Treatments*. 1-4, 2005.
- [62] Ahmadi, J., Babaee-Beigi, M., Alishahi, M., Maany, I., Hidari, T. Twelve-month maintenance treatment of opium-dependent patients. *J Subst Abuse Treat*. 26(1): 363-366, 2004.
- [63] Ahmadi J, Babaeebeigi M, Maany I, et al. Naltrexone for alcohol dependent patients *Irish J Med Science*, 173 (1): 34-37, 2004.
- [64] Ahmadi, J., Majdi, B., Mahdavi, S., Mohaghegh, M., Mood disorders in opioid dependent patients. *J.Affective Disorders*. 82: 139-42, 2004.
- [65] Ahmadi, J., Farrashbandi, H., Moosavinasab, M., et al., Treatment of heroin dependence. *German J Psychiatry*. 7 (2): 1-5. 2004.
- [66] Ahmadi, J., Pridmor, S., Fallahzadeh, M. Neurotic scores in medical students. *German J Psychiatry*. 7: 51-5. 2004.
- [67] Ahmadi, J., Maharlooy, N., Alishahi, M. Substance abuse: prevalence in a sample of nursing students. *J Clin Nurs*. 13(1): 60-4, 2004.
- [68] Ahmadi, J., Alavi, M., Alishahi, M. Substance Use Disorders in a Sample of Iranian Secondary School Students. *Social Indicators Research*, 65(3): 355-360, 2004.
- [69] Pridmore, S., Skeritt, P., Ahmadi, J. Why do doctors dislike treating people with somatoform disorder? *Australasian Psychiatry*. 12 (2): 134 -138, 2004.
- [70] Ahmadi, J., Toobaee, S., Alishahi, M. Depression in nursing students. *J Clin Nurs*. 13(1): 124. 2004.
- [71] Ahmadi, J., Ahmadi, K., Ohaeri, J. Controlled, randomized trial in maintenance treatment of intravenous buprenorphine dependence with naltrexone, methadone or buprenorphine: a novel study. *Eur J Clin Invest. Sep*; 33(9): 824-9, 2003.
- [72] Ahmadi, J. Methadone versus buprenorphine maintenance for the treatment of heroin-dependent outpatients. *J Subst Abuse Treat. Apr*; 24(3): 217-20, 2003.
- [73] Ahmadi, J., Toobaee, S., Kharras, M., Radmehr, M. Psychiatric disorders in opioid dependants. *Int J Soc Psychiatry. Sep*; 49(3): 185-91, 2003.
- [74] Ahmadi, J, Etminan, H., Javanmardi, H. Reasons for cessation of opiate use among Iranian opioids dependants. *Addictive Disorders & Their Treatment*. 2(1): 9-12, 2003.
- [75] Ahmadi, J., Rayisi, T., Alishahi, M. Analysis of substance use by primary school students. *German J Psychiatry*, 3:56-59, 2003.
- [76] Ahmadi, J., Ashkani, H., Ahmadi, M., Ahmadi, N. Twenty-four week maintenance treatment of cigarette smoking with nicotine gum, clonidine and naltrexone. *J Subst Abuse Treat. Apr*; 24(3): 251-5, 2003.
- [77] Ahmadi, J., Ahmadi, M., Twelve-month maintenance treatment of heroin- dependent outpatients with buprenorphine. *J Subst Use. April* 8(1): 39-41, 2003.
- [78] Ahmadi, J., Sharifi, M. Cannabis abuse in Iran. *Irish J Med Sci. Jan-Mar*; 172(1): 46, 2003.
- [79] Ahmadi, J., Arabi, H., Mansouri, Y. Prevalence of substance use among offspring of opioid addicts. *Addict Behav. Apr*; 28(3): 591-5, 2003.
- [80] Ahmadi, J., Motamed, F. Treatment success rate among Iranian opioid dependents. *Subst Use Misuse. Jan*; 38(1): 151-63, 2003.
- [81] Ahmadi, J., Hasani, M. Prevalence of substance use among Iranian high school students. *Addict Behav. Mar*; 28(2): 375-9, 2003.
- [82] Ahmadi, J., Maany, I., Ahmadi, M. Treatment of Intravenous Buprenorphine Dependence: A Randomized Open Clinical Trial. *German J Psychiatry* 6:23-29, 2003.
- [83] Ahmadi, J., Javadpour, A. Assessing substance use among Iranian health care students. *European J Psychiatry* 16(3): 174-177, 2002.
- [84] Ahmadi, J., Bahrami, N. Buprenorphine treatment of opium-dependent outpatients seeking treatment in Iran. *J Subst Abuse Treat. Dec*; 23(4): 415-7, 2002.
- [85] Ahmadi, J., Samavatt, F., Sayyad, M., Ghanizadeh, A. Various types of exercise and scores on the Beck Depression Inventory. *Psychol Rep. Jun*; 90(3 Pt 1): 821-2, 2002.
- [86] Ahmadi, J., Yazdanfar, F. Substance use among Iranian university students *The International Journal of Drug Policy*. 13(6): 507-508, 2002.
- [87] Ahmadi, J. A randomized, clinical trial of buprenorphine maintenance treatment for Iranian patients with opioid dependency. *Addictive Disorders & Their Treatments*. 1(1): 24-27, 2002.
- [88] Ahmadi, J., Benrazavi, L. Substance use among Iranian physical patients. *The International Journal of Drug Policy*. 13(6): 505-506, 2002.
- [89] Ahmadi, J., Ostovan, M. Substance use among Iranian male students. *The International Journal of Drug Policy*. 13(6): 511-512, 2002.
- [90] Ahmadi, J. Buprenorphine maintenance treatment of heroin dependence: the first experience from Iran. *J Subst Abuse Treat. Apr*; 22(3): 157-9, 2002.
- [91] Ahmadi, J., Benrazavi, L. Substance use among Iranian nephrologic patients. *Am J Nephrol. Jan-Feb*; 22(1):11-3, 2002.
- [92] Ahmadi, J., Ahmadi, N. A Double Blind Placebo-Controlled Study of Naltrexone in the Treatment of Alcohol Dependence. *German J Psychiatry* 2002; 5(4): 85-9, 2002.
- [93] Ahmadi, J., Benrazavi, L. Substance use among Iranian surgical patients. *The International Journal of Drug Policy* 13(6) 509-510, 2002.
- [94] Ahmadi, J. A controlled trial of buprenorphine treatment for opium dependence: the first experience from Iran. *Drug Alcohol Depend. Apr* 1; 66(2): 111-4, 2002.
- [95] Ahmadi, J., Benrazavi, L. Substance use among Iranian cardiovascular patients. *Eur J Med Res. Feb* 21; 7(2): 89-92, 2002.
- [96] Ahmadi, J., Benrazavi, L., Ghanizadeh, A. Substance abuse among contemporary Iranian medical students and medical patients. *J Nerv Ment Dis. Dec*; 189(12): 860-1, 2001.
- [97] Ahmadi, J., Fakoor, A., Pezeshkian, P., Khoshnood, R., Malekpour, A. Substance use among Iranian psychiatric inpatients. *Psychol Rep. Oct*; 89(2): 363-5, 2001.
- [98] Ahmadi, J., Sharifi, M. Prevalence of alcohol use disorders. *J Subst Use*. 7(4): 251 – 254, 2002.
- [99] Ahmadi, J., Khalili, H., Jooybar, R., Namazi, N., Mohammadagaei, P. Prevalence of cigarette smoking in Iran. *Psychol Rep. Oct*; 89(2): 339-41, 2001.
- [100] Ahmadi, J., Ghanizadeh, A. Current substance use among Iranian medical students. *Indian J Psychiatry*. 43(2): 157-161, 2001.
- [101] Ghanizadeh, A., Ahmadi, J. The MMPI Profile of Opiate Addicts of Iran: Evidence from Shiraz. *Annals of Saudi Medicine* 20, 3-4:334-5, 2000.
- [102] Ahmadi, J., Ghanizadeh, A. Motivations for use of opiates among addicts seeking treatment in Shiraz. *Psychol Rep. Dec*; 87(3 Pt 2): 1158-64, 2000.

- [103]Ahmadi, J., Khalili, H., Jooybar, R., Namazi, N., Aghaei, P.M. Cigarette smoking among Iranian medical students, resident physicians and attending physicians. *Eur J Med Res.* Sep 28; 6(9): 406-8, 2001.
- [104]Ang-Lee K, Oreskovich MR, Saxon AJ, Jaffe C, Meredith C, Ellis ML, Malte CA, Knox PC, Single dose of 24 milligrams of buprenorphine for heroin detoxification: an open-label study of five inpatients, *J Psychoactive Drugs*, 2006 Dec; 38(4): 505-12
- [105]Kutz I, Reznik V. Rapid heroin detoxification using a single high dose of buprenorphine. *J Psychoactive Drugs*. 2001 Apr-June; 33(2):191-3
- [106]Anvar M, Ahmadi J, Hamidian S, Ghafaripour S Female Sexual Dysfunction Among the Wives of Opioid-Dependent Males in Iran *Int J High Risk Behav Addict*. 2016 March; 5(1): e25435.
- [107]Ahmadi J, Sahraian A, Shariati S, Delusional disorder joined with opium dependence *Sch. J. App. Med. Sci.*, 2015; 3(9D):3387-3390
- [108]Ahmadi J, Dastgheib SA, Mowla A, Ahmadzadeh L, Bazrafshan A, Moghimi Sarani EM, Treatment of Methamphetamine Induced Persistent Psychosis. *J Add Pre Med* (2016) 1(1): 103.