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**Research Article** 

# The Assessment of Self-Esteem in Addicted Women

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#### Abstract

**Background:** Self-esteem is the level of respect which an individual pays to himself and his identity. Having healthy self-esteem is a fundamental need for human beings and lack of it may have some consequences.

**Objectives:** The aim of this study was to determine and compare the level of self-esteem among female addicts with normal control group.

**Patients and Methods:** The study is an analytical cross-sectional study. The present study was conducted on three groups: imprisoned addicted women, addicted women in the society visiting welfare associations who did not have a background of imprisonment, and a control group including non-addicts who did not have the records of imprisonment and visiting health care centers to receive consultation services. Validated Persian version of the Rosenbergs self-esteem scale was used in this study. The Chi-square test, ANOVA and Kruskal-Wallis tests were used.

**Results:** The mean age of participants was not statistically different in three groups (P = 0.75) but the other variables (i.e. level of education, job, location of living, and marital status) show significant statistical difference (P = 0.001). The mean score of self-esteem in the group of imprisoned addicts, addicts and control groups were respectively  $14.87 \pm 4.70$ ,  $15.16 \pm 4.71$ , and  $22.90 \pm 5.06$ . The mean score in the control group is significantly higher than addict group (Chi-square = 74.97, P < 0.001).

Conclusions: Lower level of self-steem should be considered as an important factor for tendency for drug abuse.

Keywords: Self-Esteem, Addiction, Rosenberg's Self-Esteem Scale

## 1. Background

Addiction is one of the problems many people experience all over the world. Numerous people are affected annually and their number increases every day. The complications of addiction include physical, psychological, familial, cultural, economic and social disorders which threaten the health of humankind. Addiction is a chronic disease which develops as a result of genetic, physiological and social factors, so that the primary characteristic of this disease is a disruption in the control of action or feeling of obligation in doing a certain action despite of being aware of its dangerous consequences (1). Due to some identity and anti-social weaknesses, some people face a paradox in complying with social norms, and use drugs to present this paradox (2). Most individuals consider addiction to be a masculine phenomenon, despite of the fact that addiction exposes individuals to risk. The number of addicted women is globally less than men but the underlying individual, social, familial, and environmental factors

of propensity to addiction is equal in both genders (3).

Female addicts are exposed to higher risk of mental disorders such as depression, anxiety, suicide, psychotic disorder, panic attacks, loss of self-confidence, poor self-concept, and high levels of stress (4).

As the other social consequences of women's addiction, one could point to the disintegration of the family. The female addicts quickly lose their families and get abandoned. In addition, they are likely to lose their selfconfidence due to their weak social functions and low communication skills, all of which also influence their emotional and communicative relations, lead them to get divorced and remain detached from family and friends (5).

In contrast to men and even normal women, female artists face numerous psychological problems and disorders. Clinical studies and experiments show the existence of depression and anxiety as the most common complications of addiction in female addicts. The studies show that certain behaviors such as suicide, high susceptibility and low self-esteem in female addicts are more frequent

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than others (6, 7). Self-esteem is the level of respect which an individual pays to himself and his identity (8). Having healthy self-esteem is a fundamental need for human beings. The reinforcement of self-esteem in life is regarded as a permanent investment because low self-esteem causes one to hide its real self (9). Low self-esteem, low selfefficiency and weakness of adaptive powers of an individual to deal with daily events could provide the underlying conditions for addiction or representation of the symptoms of addiction. The women afflicted with disorders of drug abuse are significantly susceptible to consequences of abuse, and dependent on drugs [8]. Of the most significant factors of addiction, one could point to physicalpsychological misbehaviors, rejection and insult during childhood, which generate the feelings of inadequacy, low self-esteem in adulthood, and consequent development of addiction (10).

Up to now, there have been numerous studies in this regard. Sherina et al. (2008) stated the association among self-esteem, depression and risk of suicide, risk of sexual intercourse among single individuals, pregnancy of teens and addiction (11). Hale et al. (2015) found out that self-esteem among smokers is less than non-smokers. In addition, in contrast to men, lower self-esteem was observed among women (12). Similar in some studies, significant association between self-esteem and status of addiction, age, sex, race and socioeconomic indicators has been stated (6, 13, 14).

# 2. Objectives

Considering the significance of this issue for the health system of the countries, the present study aimed to determine and compare the level of self-esteem among female addicts compared with normal females in Mashhad during 2012.

#### 3. Patients and Methods

The present study is an analytical cross-sectional one. The sample population was young addicted girls and women in the age range of 16 to 25 years in Mashhad city during 2012 (the capital of Khorasan Razavi in Northeastern part of Iran). The present study was conducted as a cross-sectional study on three groups, namely a group of imprisoned addicted women, group of addicted women in the society visiting welfare associations who did not have a background of imprisonment, and a control group including non-addicts who did not have the records of imprisonment and visiting health care centers to receive consultation services. In the present study, considering the fact that recognition of addicts in prison and at welfare associations is based on definitive diagnosis, the criterion of identification and detection of addiction to drug abuse, addiction can be defined as the abuse of opium, heroin, wine, marijuana, crystal, etc. The sample size was estimated to be 68 individuals in each group based on the difference between the two populations and ratio of usage methods (P1= 0.25, P2 = 0.8,  $\alpha$  = 0.05 and  $\beta$  = 0.02). Considering 20% drop out rate, the sample size for each group was estimated to be 80 individuals.

$$N = \frac{2(z_{(1-\frac{\alpha}{2})} + z_{(1-\beta)})^2 \sigma^2}{d^2} \tag{1}$$

The sampling was done using hierarchical method. First, each group was divided into two classes based on their age ranging from 16-20 and 21-25 years, so as to access the samples with an age range of less than 20 years. Then, the number of samples essential for the imprisoned addict group was randomly selected from the list of prisoners. The essential number of samples in an addict group without any history of the imprisonment was selected from a list of addicts visiting welfare centers, addiction treatment institutes and health care centers. The three groups were matched in terms of their age through group matching. Then they were divided into 2 grougs of 40 with the age groups of 16 - 20 and 21 - 25 years. Considering all associated factors and subsequent interviews done with individuals, the addicts were included and those who expressed they were not addicted were excluded from present study. Validated Persian version of the Rosenberg self-esteem scale was used in this study. The Rosenberg self-esteem scale was developed to assess the feelings of acceptance and self-esteem. Compared with other common scales such as Coopersmith's (1967) self-esteem inventory, this sale is a simple instrument. It is reliable (with sufficient internal consistency) and valid (convergent and divergent). It is also applicable to any age group with the least educational level of fifth grade and is currently regarded as one of the most common instruments for measurement of total selfesteem perception as a general assessment of a person of his/her value as a human (15). The Rosenberg self-esteem scale has been used in similar studies on drugs and their association with self-esteem (16-18).

The gathering of information was done by questioners who had already been justified in a training course and had obtained the essential skills. The present study was approved by ethics committee of Mashhad University of Medical Sciences. In all cases, the questionnaires were filled in without mentioning the name of the subjects and only through coding. The subjects were assured that their information will be confidential and will not be disclosed under any terms. The results will be published collectively without mentioning the name of individuals.

At first, after filling the check-lists and questionnaires, the accuracy of collected data was verified through examination of key questions. The data were analyzed through SPSS Software (version 11.5). For analysis, the Chi-square test, variance analysis and Kruskal-Wallis test were used. In all of the calculations, P < 0.05 was regarded as the level of significance.

# 4. Results

The demographic characteristics of the three groups were shown in Table 1. As it can be vividly observed, apart from age, the other variables (i.e. level of education, job, location of living, and marital status) show significant statistical difference.

The mean score of self-esteem for the three study groups are represented in the following Figure 1. The mean score of self-esteem in the group of imprisoned addicts, addicts and control group were respectively 14.87  $\pm$  4.70, 15.16  $\pm$  4.71, and 22.90  $\pm$  5.06. As it can be observed, the mean in control group is significantly higher than addict group (Chi-square = 74.97, P < 0.001).



#### 5. Discussion

In the present study, reviewing educational status in the three study, a significant difference was observed in the level of illiteracy in the group of imprisoned addicts. The same was reported for the whole groups of the addicts compared with control group. The obtained results match the findings of the majority of other similar studies. In a similar study by Sattari et al. (19) with the objective of determining the influential factors upon drug abuse among prisoners in Qom and Tabriz, 23% of imprisoned addicts (n = 100) in Tabriz and 4% of imprisoned addicts in Qom were illiterate. The study also showed that among those individuals, 26% in Tabriz and 49% in Qom had elementary education, 13% in Tabriz and 15% in Qom had intermediate education and 20% in Tabriz and 15% in Qom had high-school education. In this regard, 7% of the samples in Tabriz and 1% of the samples in Qom had higher education.

Meysamie et al. (20) conducted a study to examine the status of drug abuse in rural regions of Babol in Iran. The results showed that 31.1% of participants were illiterate, 22.3% could write and read, 23.2% had elementary studies, and 11% had high-school diploma. The association between lower educational level and addiction among women might be due to other factors accompanying illiteracy. The lower educational level was accompanied with joblessness, being in lower socioeconomic stratum and living in a crowded family which all of them mutually influence each other.

In regard to marital status, the results of the present study showed that the number of divorces in imprisoned addict group is more than three times higher than the addict group. In the study by Meysamie et al. (20), 90.5% of addicts were married and 90.5% were single. In a study by Rafiey et al. (21), the majority of individuals were single. It should be noted that the control group included the individuals referring to health centers for consultation services for health and marriage affairs and as a result, the number of single individuals in this group could be justified. Considering the results observed in this study, one could conclude that there is a direct association between imprisonment and the disintegration of families, but one cannot confidently state whether imprisonment of individuals leads to disintegration of families.

The results of the present study show that almost 30% of population of addicts live in suburbs while this ratio in control group was zero. In a study by Rafiey et al. (21) to examine the prevalence of using shared syringe among injecting drug users (IDUs) in Iran, the results showed that the prevalence of using a shared syringe in suburban regions is more than the other urban regions.

Considering higher demographic density in suburban regions, lack of proper urban structures, high fertility, poverty, illiteracy, higher availability of drugs, unemployment and false jobs, rising crime in these areas, lower levels of social security, and lower access to leisure facilities are involved in creation of conditions for prevalence of drug abuse. This condition shows the necessity of conducting more studies regarding the factors contributing to addiction in suburban areas.

Based on the results of the present study, the ratio of employment in governmental jobs (i.e. students and employee) in the two groups of addict and imprisoned addict was significantly lower than the control group (65.8%

Factor	Imprisoned Addict (N = 80)	Addict (N = 80)	Control (N = 76)	P Value
Age, mean (SD)	21.10 (3.33)	21.21 (2.39)	20.90 (2.72)	0.75
Education				< 0.001
Illiterate	12 (15.6) <sup>a</sup>	3 (3.8)	0	
Elementary	25 (32.5)	18 (22.8)	0	
Secondary	29 (37.7)	19 (24.1)	12 (15.8)	
Diploma	9 (11.7)	35 (44.3)	30 (39.5)	
Associate	2 (2.6)	4 (5.1)	11 (14.5)	
Bachelor and Higher	0	0	23 (30.3)	
Job				< 0.001
Housekeeping	32 (41)	30 (38)	13 (17.1)	
Jobless	23 (29.5)	20 (25.3)	10 (13.2)	
Employee	23 (29.5)	29 (36.7)	53 (69.7)	
Lodging				< 0.001
Center of City	65 (81.3)	55 (68.8)	71 (93.4)	
Suburbs	3 (3.8)	20 (25)	0(0)	
Town	11 (13.8)	4 (5)	1 (1.3)	
Villages	1(1.3)	1 (1.3)	4 (5.3)	
Marital Status				< 0.001
Single	19 (23.8)	38 (47.5)	75 (98.68)	
Married	28 (35)	31 (38.8)	0(0)	
Divorced	31 (38.8)	9 (11.3)	1 (1.31)	
Widowed	2 (2.5)	2 (2.5)	0(0)	

Table 1. Demographic Characteristics in Three Groups of Addicts, Addicts without Prison Records, and Control

<sup>a</sup>Value is expressed as No. (%).

versus 35.5%). In regard to status of unemployment in the group of imprisoned addicts, this group had higher rates of joblessness compared with the addict group without history of being in prison. The same was observed for the two addict groups compared with control group.

In the study by Sattari et al. (19) on prisoners in Tabriz and Qom, the results showed that in Tabriz 4% of drug abusers had been previously employed and 94% of them were jobless or had false jobs. In Qom, 3% of the prisoners had been previously employed and 79% of them were jobless or had false jobs. In a study by Goodarzi et al. (22) carried out in MMT clinics of Shiraz, 66% of the participants were unemployed. Considering the results of numerous studies done in the past, unemployment is a significant risk factor of drug abuse. On the other hand, the addicts are more likely to lose their jobs due to absenteeism or low concentration at workplace. The examination of causal relationships between unemployment and drug abuse demands more precise studies. In the present study, the mean scores of self-esteem in control group is more than the two addict groups. Baghan (23) found out that there is a significant association between increase of self-esteem and enhanced level of resistance against drug abuse. As a result of higher self-esteem, the individuals experience the risk of drug abuse less frequently.

Other studies conducted on these subject show a significant association between level of self-confidence and representation of different types of health behaviors (24). Higher level of self-confidence is a preventive factor in regard to inclination of individuals to drug abuse. This might be due to maturity of an individual's identity in all of its aspects or presence of distinctive characteristics in these individuals such as paying no attention or lack of excessive attention to beliefs of peers due to high selfconfidence.

It should be noted that there were certain limitations in the present study. First, due to the fact that the control group (i.e. non-addict and without records of imprisonment) were selected among those visiting health care centers through age matching, and therefore, the majority of the subjects were single. Second, due to the fact that present study is cross-sectional, it is not possible to examine the transposition of exposure and outcomes and it is not possible to infer the causality in the present study.

#### 5.1. Conclusion

The present study showed that there is a significant association between certain factors (i.e. level of education, employment, location of living, especially suburbanization and marital status) and drug addiction. These factors are known as health determinants. Finally, one could conclude that the unfavorable status of social items and psychological health are the significant factors of tendency toward addiction. Addiction has serious consequences (25) which requires policy makers special attention.

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## Footnotes

**Authors' Contribution:** Maliheh Dadgar: design, method, analysis, writing, final approval; Hakimeh Baseri: part of analysis, writing, final approval; Arash Alipourtabrizi: part of analysis, writing, final approval; Mohammad Khajedaluee: design, method, analysis, editing, final approval.

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#### References

- 1. Khajedaluee M, Dadgar Moghadam M. Methods and patterns of drug abuse among young addict women. *J Res Health*. 2013;**3**:527-35.
- Chaloupka F, Taurus J, Grossman M. Economic Models of Addiction and Applications to Cigarette Smoking and Other Substance Abuse. University of Illinois at Chicago; 2006.
- 3. Rahimi Movaghar A, editor. A Situation Analysis on Drug Abuse and Response in the Region, 2002. Second Meeting of the Regional Advisory Panel on Impacts of Drug Abuse (RAPID). 2003; Tehran.
- Glendinning A, Inglis D. Smoking behaviour in youth: the problem of low self-esteem?. J Adolesc. 1999;22(5):673-82. doi: 10.1006/jado.1999.0262. [PubMed: 10527538].

- Abernathy TJ, Massad L, Romano-Dwyer L. The relationship between smoking and self-esteem. *Adolescence*. 1995;30(120):899–907. [PubMed: 8588525].
- Kawabata T, Cross D, Nishioka N, Shimai S. Relationship between selfesteem and smoking behavior among Japanese early adolescents: initial results from a three-year study. J Sch Health. 1999;69(7):280–4. [PubMed: 10529966].
- Shayegan E. Addiction effects in pregnancy and the role of women police officer in treatment [in Persian]. Women Police Officer. 2010;14:32– 40.
- Salehi M, Kharaz Tavakol H, Shabani M, Ziaei T. The relationship between self-esteem and sexual self-concept in people with physicalmotor disabilities. *Iran Red Crescent Med J.* 2015;17(1):eee25359. doi: 10.5812/ircmj.25359. [PubMed: 25763279].
- Malik S, Khan M. Impact of facebook addiction on narcissistic behavior and self-esteem among students. *J Pak Med Assoc.* 2015;65(3):260–3. [PubMed: 25933557].
- Khajedaluee M, Dadgar Moghaddam M, Erfanian MR, Ahangaran M, Babaei A. Anxiety and depression in young substance-dependent women in Mashhad city Northeast of Iran [in Persian]. J Fundament Mental Health. 2014;15(4):254–62.
- Sherina MS, Rampal L, Loh JW, Chan CL, Teh PC, Tan PO. Self-esteem and its associated factors among secondary school students in Klang District, Selangor. *Med J Malaysia*. 2008;63(1):26–30. [PubMed: 18935727].
- Hale WJ, Perrotte JK, Baumann MR, Garza RT. Low self-esteem and positive beliefs about smoking: a destructive combination for male college students. *Addict Behav.* 2015;46:94–9. doi: 10.1016/j.addbeh.2015.03.007. [PubMed: 25838000].
- Harun LM. Dimensions and types of Malay Family Interaction: A Humanistic Approach. United Kingdom: Keele University; 1995. PhD Thesis.
- 14. Byrne DG, Mazanov J. Self-esteem, stress and cigarette smoking in adolescents. Stress Health. 2001;17(2):105–10.
- Rajabi G, Bohlel N. The reliability and validity of Rosenberg selfesteem scale in freshman students of Shahid Chamran University of Ahvaz. J Educ Psychol Res. 2008;3(2):33-48.
- Mohammadpour A, Rajaee A. Determination of the prevalence of stages in cigarette smoking and its correlates in grade-10 male students in Shiraz, 2003. J Mazandaran Univ Med Sci. 2004;14(43):64–72.
- Mohammadpoor A, Rustami F, Fakhari A. The use of psychotropic drugs in high school male students in Tabriz [ in Persian]. *Cognitive Science News*. 2005;37:58–67.
- Mohammadpoor A, Rustami F, Fakhari A. Multivariate analysis of the psychological factors associated with smoking among adolescents [in Persian]. Payesh J. 2004;5(3):84–177.
- Sattari M, Islambulchilar M, Toluyi M, Mashayekhi S. Sociodemographic characteristics of the addicted inmates of Qom and Tabriz prisons in Iran. *Adv Pharm Bull.* 2012;2(1):61–9. doi: 10.5681/apb.2012.009. [PubMed: 24312772].
- Meysamie A, Sedaghat M, Mahmoodi M, Ghodsi SM, Eftekhar B. Opium use in a rural area of the Islamic Republic of Iran. *East Mediterr Health J.* 2009;15(2):425–31. [PubMed: 19554990].
- Rafiey H, Narenjiha H, Shirinbayan P, Noori R, Javadipour M, Roshanpajouh M, et al. Needle and syringe sharing among Iranian drug injectors. *Harm Reduct J.* 2009;6:21. doi: 10.1186/1477-7517-6-21. [PubMed: 19643014].
- 22. Goodarzi F, Karrari P. Epidemiology of drug abuse (chronic intoxication) and its related factors in a MMT clinic in shiraz [in Persian]. *Iranian J Toxicol.* 2011;4(4):377–80.
- 23. Baghan T, editor. The relationship between attitudes to drugs, selfesteem and resilience of women and men working in government offices [ in Persian]. First International Congress on Drug Use. 2012; Iran.

- 24. Torres R, Fernandez F, Maceira D. Self-esteem and value of health as correlates of adolescent health behavior. *Adolescence*. 1995;**30**(118):403-12. [PubMed: 7676875].
- 25. Khajedaluee M, Dadgarmoghaddam M, Erfanian M, Alipourtabrizi A,

Khadem-Rezaiyan M. Women, drug dependency and consequences: a study from a developing country. *J Addict*. 2015;**2015**:831954. doi: 10.1155/2015/831954. [PubMed: 25802797].