

Quality of Life and its Related Factors in Iranian Addicted Women Referring to Substance Abuse Treatment Centers

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Abstract

Background: Drug addiction is one of the most common social problems that is caused by the illegal use of addictive drugs; it affects the quality of life of substance users. Therefore, this study aimed at determine the quality of life and its related factors among addicted women referring to substance abuse treatment centers in Hamadan, west of Iran.

Methods: This cross-sectional study was carried out on 120 Iranian female substance users recruited through census sampling method in 2018. Data collection tools consisted of demographic characteristics and quality of life questionnaire (SF-36). Data were analyzed using SPSS-16 via one way ANOVA and chi-square tests.

Results: The mean age of the participants was 33.2 ± 12.1 years. The last drug used by the participants was methamphetamine (53.3%), methadone (20.8%), and heroin (12.5%), respectively. The mean score of total quality of life was 35.35 ± 13.5 that indicated unsatisfactory level. Moreover, there was a significant association between quality of life and age, educational level, place of residence, and job status ($P < 0.05$).

Conclusion: According to the results, the quality of life of the participants was found to be at unsatisfactory level. The identification of more vulnerable groups may increase the effectiveness of intervention programs.

Background

Drug addiction is one of the most common social issues and problems (1). According to the definition proposed by the World Health Organization, addictive substances include every substance that the complications resulting from its consumption can affect the physical and psychological health of the individual and family, and also affect the economic, social, political, and cultural systems of the community (2, 3).

According to the World Drug Report 2013, the number of illicit drug users has increased since 2008 (1). Perhaps, drug abuse had previously been a problem exclusively observed in males, however nowadays, due to the departure from the traditional lifestyle, the growth of urbanization, and the social movements of females, women are also similarly subjected to social phenomena such as addiction (4). Based on the statistical data on population published by the United Nations, about 200 billion people aged 15 to 24 years old, which form about 5% of the world's total population, are practicing substance abuse (5). Although addiction seems to be a male issue in Iran, women as half of the population are directly and indirectly affected by addiction (6). In general, statistical data indicate that women account for 9% of all drug users, and substance use among women quadrupled over the past decade (7). Various studies have investigated the etiology of addiction among females; based on the results of such studies, several factors such as the availability of substance, lack of awareness, pressure from spouses or friends, the need for a detachment from reality, poverty, domestic violence and sexual abuse, psychological pressure, the presence of addicted persons in the family, and divorce are the reasons for drug use in females (8, 9).

The use of narcotic substances by females has negative consequences and outcomes, among which we may note abandonment, the formation of an addicted generation, violence, self-mutilation, tattooing, shared injection, unprotected sexual behavior, and reduced communication with ordinary people (8, 10). According to studies conducted in Iran, of all women who practice substance abuse, 5–17% have a history of unprotected sexual relationships; moreover, hepatitis C is observed in 1.9–100%, tattooing in 35.7%, the use of shared syringes for injection in 45%, sexually transmitted infections such as syphilis in 1–6%, chlamydia in 1–5%, herpes in 38–61%, and HPV in 42% of female drug users (11). However, most of addicted women conceal their addiction as they fear stigma and discrimination (10). Nowadays, improving the quality of life is one of the most important goals of treatment intervention programs. Based on the definition, the quality of life is an individual's perception of his / her own health status and the degree of satisfaction with that condition. The World Health Organization defines the quality of life as a person's perception of his / her status in life that is associated with goals, expectations, values, and individual concerns. Existing evidence suggests an undesirable quality of life among Iranian addicted women (12).

Since women are responsible for motherhood and upbringing the next generation, the presence of an addicted mother in the family can cause serious harms to spouse and children, and consequently to the community. Therefore, it is necessary to design and implement comprehensive interventions to prevent substance abuse in women. Furthermore, to devise effective educational programs and interventions to improve the quality of life of addicted women, it is essential to obtain information about the status of abusing addictive substances and the related changes in the quality of life. Therefore, the present study aimed at determining the quality of life and its related factors among addicted women covered by substance abuse treatment centers in Hamadan.

Methods

The present study was a cross-sectional study conducted on women referring to substance abuse treatment centers in Hamadan in 2018. After identification of and listing substance abuse treatment centers in Hamadan that exclusively provided services for females, the samples were selected from among all women referring to the centers using the census method. After coordinating with the authorities and obtaining their approval, the researcher visited the substance abusers and invited them to participate in the study. The researcher ensured the volunteers about the confidentiality of the research and collected data on quality of life. The study had specific inclusion criteria, and it only recruited addicted people who were living in the city or suburbs of Hamadan, had a history of substance abuse in the past or present, were willing to take part in an interview or complete a questionnaire, and had a history of referring to public substance addiction treatment centers exclusively designed for women. Based on the exclusion criteria, the researchers excluded individuals visiting private centers and those who were unwilling to cooperate with the research team.

In this study, data collection tools consisted of two standard questionnaires that collected data on the status of addictive substances and quality of life. After obtaining informed consent, Using interviews and

self-reports by the participants the questionnaires were completed. Moreover, demographic data, including age, life status, level of education, and job status were also obtained from the participants.

Questionnaire on the status of addictive substances abuse: It was used to collect data on the type of substance, including cannabis, opium, heroin, cocaine, ecstasy, and new industrial substances that were abused by the subjects within the past one month, six months, and one year. Each item was investigated using a separate question, answered with yes or no (13).

Questionnaire on the quality of life with 36 questions (SF-36): This questionnaire has 36 questions that are categorized in eight subscales. These subscales are: physical functioning (10 questions), role impairment due to physical health / role physical (4 questions), role impairment due to emotional health / role emotional (3 questions), energy and fatigue / vitality (4 questions), mental health (5 questions), social functioning (2 questions), bodily pain (2 questions), and general health (5 questions). Furthermore, with integrating the subscales, two other general subscales are achieved, which are known as Physical Component Summary (PCS) and Mental Component Summary (MCS). In this questionnaire, lower scores represent a lower quality of life and vice versa (14).

The collected data were analyzed by SPSS18 using descriptive statistics (mean, standard deviation, etc.), and linear regression tests to determine the predictors of quality of life. Statistical analysis was performed at a significance level of 0.05.

Results

In this study, the age range of the participants was between 15 to 73 years old, with a mean age of 33.2 ± 12.1 years; of all, 33.3% of the participants were in the age group of 26–35 years old and 30.8% of the participants were in the age group of 15–25 years old. Other demographic data is presented in Table 1.

Table 1
 Characteristics of the studied participants (n = 120)

variables	Category	N	Percentage
AGE	15–25	37	30.8
	26–35	40	33.3
	36–45	25	20.9
	46–55	10	8.3
Level of Education	Illiterate	6	5
	Elementary Education	29	24.2
	Secondary Education	62	51.7
	Diploma	19	15.8
	University Education	4	3.3
Living Condition	With Parent	7	5.8
	With Father	3	2.5
	With Mother	6	5
	Lonely	47	39.2
	With Family	57	47.5
Job Status	Jobless	73	60.8
	College Student	4	3.3
	Student	6	5
	Worker	22	18.3
	Farmer	1	0.8
	Employee	3	2.5
	Free Job	8	6.7
	Other	3	2.5

The most commonly used drugs by the participants in the study, which were abused in the past one month, were crystal, methadone, and heroin with a prevalence of 53.3%, 20.8%, and 12.5%, respectively. Moreover, the most commonly used drugs by the addicted women, which were abused in the past six months, were crystal, methadone, and heroin with a prevalence of 48.3%, 18.3%, and 18.3%, respectively. The most commonly used drug in the past year was crystal with a prevalence of 45.8%. The most

commonly used drug among the studied participants, abused in their life span, was opium and its derivatives (burnt, sap, etc.) that was reported by 64.2% of the participants, followed by crystal, methadone, and heroin that, respectively, were reported by 53.3%, 49.2%, and 40% of the participants (Fig. 1).

Based on the results, the participants obtained only 35.3% of the maximum achievable score of the quality of life (total score of quality of life), which indicates poor quality of life among the addicted women in Hamadan. Moreover, considering the results on the pain and discomfort score, the participants obtained 38.3% of the maximum achievable scores, which indicated an unfavorable status. The participants obtained a score of 8.75 in the subscale of the limitation in physical function (role physical), which was the minimum score among all the subscales and indicated the most favorable condition. Table 2 presents the scores of all subscales of the quality of life among the studied people.

Table 2
Mean, SD, and Range of Scores and Percentage of Mean from
Maximum Obtainable Score for Dimensions of Life Quality

QOL Dimensions	Mean	SD	Range	Percentage
General Health	34.79	17.2	0-100	34.7%
Physical Functioning	36.07	25.2	0-100	36.1%
role physical	8.75	25.4	0-100	8.75%
bodily pain	38.27	21.6	0-100	38.3%
social functioning	44.06	21.1	0-100	44%
mental health	10.56	26.2	0-100	10.5%
vitality	35.79	19.2	0-100	35.8%
role emotional	41.17	14.5	0-100	41.1%
Total score of QOL	35.35	13.5	0-100	35.3%

Based on the results of simple linear regression analysis, the variables of age ($B = 0.25$), education ($B = 2$), life status ($B = 0.17$), and age at the first drug abuse ($B = 0.27$) were identified as the predictors of the quality of life of the women who participated in the study (Table 3).

Table 3
Linear regression analysis to predict the QOL dimensions

Independent Variables	Coefficient	SE	β	95% CI		P-value
				Lower	Upper	
AGE	2.86	1.28	0.25	0.33	5.4	0.027
Education Level	3.17	1.41	0.02	0.37	5.1	0.027
Livening Situation	-2.25	1.09	-0.17	-4.42	-0.07	0.043
Job Situation	0.32	0.49	0.05	-0.64	1.28	0.509
Age at First Use	3.22	1.37	0.27	0.52	5.93	0.020
β : Standardized regression coefficient, SE: Standard error, CI: Confidence Interval.						

Discussion

This study aimed at determining the quality of life and its related factors among addicted women who were covered by substance abuse treatment centers in Hamadan. According to the results of the study, the age of the participants at the first abuse of different materials ranged between 16 and 25 years, with a mean age of 23.57 ± 1.54 . These findings indicate that the vulnerability to substance abuse is higher among people in the young age (15). Therefore, it can be concluded that the probability of drug abuse increases in this age range. Undoubtedly, women in the mentioned age range experience severe stress and distress and may consider drug abuse as a way to reduce stress. As observed in the results, the most commonly used drugs by the participants in their lifetime were opium and its derivatives, as well as crystal, methadone, and heroin. This finding is in line with the results reported by Movaghar et al. (16).

The findings of this study indicate an undesirable quality of life among the addicted women in Hamadan. Consistent with our study, Muller et al.'s study reported the undesirable status of the quality of life among addicted women (17). Moreover, the results of a study Tracy et al. in the United States also indicated the poor quality of life among the addicted women (18). The low quality of life of addicted women is probably due to the increase in dopamine in the body, the development of the phenomenon of tolerance, and physiological and psychological dependence of the individual on addictive substances that can lead to irritability, aggression, and other psychological symptoms. In general, this process reduces physical functioning, undermines psychosocial capabilities, and decreases the quality of life in individuals. Therefore, it is necessary to design and implement educational interventions to improve the quality of life of these women.

In the present study, age, education, life status, and age at first drug abuse were the predictors of women's quality of life. As observed, the quality of life was lower among addicted women who were younger, had lower levels of education, were living alone and away from their family, and started drug abuse at

younger ages. The results of this study are consistent with the results of other studies. For example, in a research by Marini et al., the quality of life of people with a history of substance abuse had a relationship with the level of education (19). Furthermore, the results of a study by Zardkhaneh Akbari et al. showed that the promotion of relationships with parents and living with parents, spouse, and family were the protective factor against addiction (20). Therefore, people who have a sense of belonging to family and have strong family ties do not develop a confused identity; on the other hand, intimate relationships between family members and children prevent people from addiction. Findings of a study by Muller et al. showed that the quality of life in illiterate women and those with a low level of education was in an unfavorable level (17). The results of Sadeghi et al.'s study showed that implementing therapeutic interventions in young women and those who started taking drugs at an early age helped to improve different dimensions of quality of life improved one, four, and eight months after the treatment (21). Therefore, it is necessary to design interventions for addicted women who are younger, have a low level of education, live alone and without a guardian, and those who started taking drugs at an early age to improve their quality of life.

This study had some limitations, as it was conducted only on women with a history of drug abuse who were referring to substance abuse treatment centers in Hamadan. It is recommended to conduct similar studies on other addicted women who do not refer to substance abuse treatment centers. Self-reporting and the use of a cross-sectional design were among the other limitations of the study. It is suggested to conduct qualitative studies to explain the reasons for women's addiction and to explain the reasons for poor quality of life in women who abuse substance.

Conclusion

According to the result, the quality of life of the participants was found to be at unsatisfactory level. The identification of more vulnerable groups may increase the effectiveness of interventional programs.

Abbreviations

PCS

Physical Component Summary; MCS:Mental Component Summary; QOL:Quality of life.

Declarations

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Availability of data and materials:

All supporting data is available through the corresponding author.

Authors' contributions:

MB and HJ developed the original idea and the protocol, abstracted and prepared the manuscript. AK participated in study design and analyzed the data. KB and TN contributed to study design and data gathering. All authors read and approved the final manuscript.

Ethics approval and consent to participate:

All the women were informed about the quality of the implementation of the project, confidentiality of the information, and the purpose of the project, and only if they would like, they were enrolled into the study. Participants indicated their informed consent by clicking the "I Agree" button before completing the questionnaire. Also the number of participants under the age of 16 was low (n=3), without any parents. According to the Iranian ethics committee guidelines, the participants were considered emancipated minors and written informed consent was received from them and manager of care centers. This study with all consent process was approved by the Ethics Committee at Hamadan University of Medical Sciences (No: IR.UMSHA.REC.1397.3).

Consent for publication:

Not applicable.

Competing of Interest:

The Authors declare that they have no competing interests.

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Figures

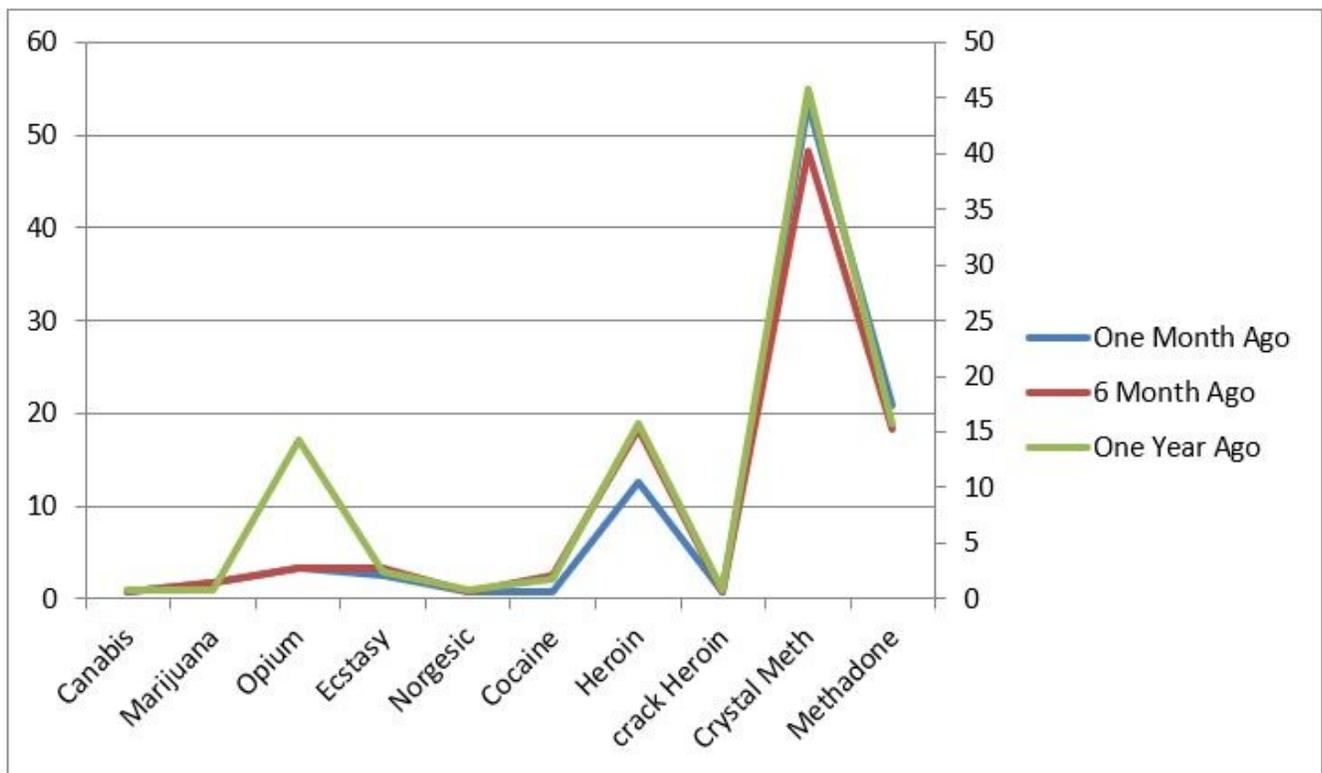


Figure 1

Frequency of drug abuse within the past one and six months and one year among the studied participants