



## COMPARISON OF QUALITY OF LIFE BETWEEN OPIOID DEPENDENTS WHO REFERRED TO YASUJ ADDICTION CLINICS AND THE CONTROL GROUP

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### Abstract

**Introduction:** Addiction is a kind of physical- spiritual and mental illness that endangers the health of the individual, family and society, because of its progressive essence in life. This long term and chronic disorder as a type of crisis for addicts can lead to a reduced quality of life physically and mentally. This research compares the life conditions and quality in both addict and control groups.

**Material and methods:** This cross-sectional study selected 100 addicts among persons who have referred to Yasuj addiction clinics and 101 non- addicts, as those accompanying patients who have referred to the emergency center of Shahid Beheshti hospital of Yasuj. We used SF-36 questionnaire with 36 questions in order to examine the quality of life. The information of the questionnaire was analyzed and examined with SPSS software.

**Results:** The findings showed a significant (meaningful) difference between addict and control groups in their quality of life. The quality of life of substance users was significantly lower than nonusers in all areas of life.

**Conclusion:** The results showed that addiction led to a decreased quality of life in different physical and spiritual dimensions.

**Keywords:** addict, quality of life, opioid dependence

### Introduction

The World Health Organization defines addiction: a set of physiological, behavioral and cognitive phenomena with different intensity, during which the consumption of substance or psychoactive substances takes the highest priority. Necessary characteristics comprise absent-mindedness, desire for drugs and constant drug seeking behavior. The determining and difficult consequences of drug addiction can be biological, physiological or social, and these consequences usually have a mutual effect. (1) Addiction, or more precisely drug abuse, is a physical, mental, social and spiritual disease and many pre-addiction factors play a role in its formation. As studies show, a high percentage of human societies suffer from drug abuse. It has increased over the recent years in most of the countries and has severely threatened human resources and national capitals, especially the youth who are more vulnerable to drug abuse than other members of the society. (2) Nowadays, addiction to drugs, addiction and illegal trade of these drugs is brought up as a global crisis. (3) As reported by the World Health Organization in 2005, there are about 200 million people addicted to opioids in the

world, and unfortunately, the highest rate of addiction is in Iran with 2.8 percent of the country's population, and Kazakhstan with 2.3 percent and Russia with 2.1% of its population are in the next rank. (3, 4)

Currently, drug addiction and abuse is a health problem in Iran. As reports the anti-narcotics headquarter, about 2 million people are drug users in Iran. (5) Addiction is a physical-mental and psychological illness that endangers the health of the individual, family and society because of its effects in all dimensions of life. (6, 7) Indeed, this issue is a great personal and social problem which, besides its physical and spiritual effects for addicts, also threatens and damages the health of society economically, politically and culturally. (8)

Drug users have, from a psychological point of view, a vulnerable personality trait. (9) The psychological and personality characteristics of drug addicts are not only because of drugs, but addicts had many psychological and personality deficiencies before addiction, which appeared and intensified more destructively after addiction, so the problem of drug addicts is not only drugs, but, in principle, the mutual relationship between his personality and addiction. (10) Various factors such as social disruption, peer pressure, family factors, genetics, emotional problems, and psychological problems have been brought up for the etiology of drug abuse. (11, 12)

Since the quality of life in sick individuals refers to a state of well-being that reflects the physical, mental and social condition, chronic and long-term disorders like addiction as a crisis in the life of individuals, can lead to a decrease in quality of life psychologically and physically. (13) Maintaining and improving the patients' quality of life is a most important goal of healthcare systems. Improving the patients' quality of life is also directly associated with the consideration of healthcare providers. (14) Measuring individuals' quality of life is essential for evaluating chronic diseases, improving the doctor-patient relationship, evaluating the effectiveness and relative advantage of different treatments, health-medical research services, health-medical websites, economic evaluation and distribution of resources. (15)

Chronic diseases affect directly and indirectly individuals' lives. (16) These diseases not only disrupt the patient's life but also affect the life of the individuals caring for the patient. (17) Addiction as a chronic disease affects all aspects and dimensions of the life of the affected person, his family, and relatives. (18) The quality comprehends two dimensions of mental and physical performance, both of which are associated with drug use because of the negative psychological (such as depression, anxiety, breakdown of family relationships) and physical (such as physical pain and physical condition) consequences of addiction. The physical and psychological consequences of addiction lead to a decrease in the quality of life and life satisfaction in drug users. (19) The frequency of poor health behaviors by addicts, such as lack of sleep, lack of exercise, and lack of adequate self-care, can directly lead to a decrease in a quality of life physically. (20)

Substance abuse has adverse physical, psychological, and social consequences. Some examples include muscle weakness, body pain, lack of proper social relationships, aggression, depression, anxiety, poor quality of life and life satisfaction. Addiction affects person's normal life by changes in behavior, self-esteem, nutrition, work and social relations, and these changes lead to a decrease in the quality of life. Physical energy, hope for life and satisfaction with life decrease in them. (21) Previous studies have investigated the importance of the quality of life of drug addicts. Katibai et al. (2019) in their study selected 30 addicts with AIDS, 30 non-addicts with AIDS from the care centers for AIDS patients and 30 healthy people. They concluded that AIDS infection and addiction can add together severe physical, mental, and social problems to the patient's problems and pains. (22)

Hojjati et al. (2018) conducted a study on mental health and its relationship with quality of life in drug addicts with a sample of 322 people. This study used the SF17 questionnaire and divided it into 3 levels of unfavorable, favorable, and somewhat favorable to study the quality of life. The quality of life by addicts was revealed as somewhat favorable, and the lack of facilities and recreational activities was the most important aspect of quality of life. The results showed a significant relationship between the quality of life and the type of substance, gender, and occupation. This study has limited its generalizability of the results, because it considered a small age range of

addicts (20-30 years old) and only the addicts referring to addiction treatment centers of this study. (23)

Qureshi et al. (2018) conducted a study with a sample of 48 injection drug addicts. They concluded that injection drug addicts do not have a good mental health status. (24) Shams Esfandabad and Nejad Naderi (2018) conducted a study with a sample of 200 people (100 addicted and 100 non-addicted). They concluded addicted individuals compared to non-addicted ones had a lower quality of life. The addicts were significantly lower in all aspects of the quality of life compared to the control group. Seemingly, regarding only two addiction treatment centers and a small age range (20-40 years old) has limited its generalizability of the results. (25) Leonardo et al. (2012) in their study showed that individuals who use cocaine have a lower quality of life, and cocaine users who depend on alcohol have a lower quality of life than those who are not dependent on alcohol. (26)

Smith and Larson (2003) showed that addiction leads to a decrease in the quality of life and that the quality of life of these patients is lower than that of the general adult population. (27)

Studying the quality of life of addicts seems useful for several reasons: importance of the problem of drug addiction in the society and its dangerous complications and injuries, increasing prevalence of this problem in today's society, quality of life in individuals' tendency towards drugs, and that the quality of life of addicts plays a role in the failure of treatment programs and recurrence of the disorder. Therefore, this research compared the quality of life of drug addicts who referred to Yasuj addiction treatment clinics with control subjects.

### **Materials and methods**

This study was cross-sectional. We selected 100 addicts in a cluster who referred to addiction treatment clinics in Yasuj and 101 non-addicts of the companions of patients who referred to the emergency room of Shahid Beheshti Yasuj. The control group was randomly selected from the companions of non-addicted patients who referred to the emergency room (101 people). The participants were explained about the purpose of the research, gave informed consent, and then the quality of life questionnaire was given to each of the groups. We explained the participants on filling the questionnaires and asked them to answer all the questions carefully.

SF-36 questionnaire (Quality of Life Questionnaire) evaluates the quality of life. A most famous general tool for measuring quality of life is a standard version of the short 36-question health screening test (SF-36), used in the international quality of life assessment project. The research units completed this 36-question test within ten minutes, and its results show the score of the quality of life in physical and mental dimensions. This test comprises eight subscales of understanding general health, physical performance, limited role playing because of physical problems or emotional problems, social functioning, physical pain, exuberance and mental health. The score of the physical dimension of quality of life fell back on the scores in the subscales of understanding general health, physical performance, limited role playing because of physical problems, physical pain, and exuberance, and the score of the psychological dimension of quality of life fell back on the scores in the subscales of understanding general health, mental health, limited emotional role playing.

This questionnaire is a useful tool for individuals' perception of their health. (28)

Researches on the quality of life show that this questionnaire has high validity and reliability. Viuer Sherbon has checked and verified its original text through content validity. Mac Horney et al. (1993) believe that the correlation coefficient of the subscales of the short 36-question health screening test in studies which have used other tools and criteria for measuring physical and mental health is between 9% and 8%. (29)

The information of the completed questionnaires by the participants was examined and analyzed through SPSS software.

### **Results**

This study compared the quality of life in drug addicts and the control group. The research used the quality of life questionnaire. It has 36 questions and eight dimensions. The research findings are:

**Table 1-** Comparison of age distribution (year) in addicts and control group

| Control group   |                    | Addict |                    |
|-----------------|--------------------|--------|--------------------|
| Mean            | Standard deviation | Mean   | Standard deviation |
| 29              | 7                  | 31     | 8                  |
| T=-1.57, p=0.11 |                    |        |                    |

As Table 1 shows, the average age of the participants in the addict group was 31 and the average age of the control group was 29. There is no significant difference between the control and addict groups in age distribution ( $p>0.05$ ). Therefore, the case and control groups are similar in age.

**Table 2:** Comparison of sample individuals (addict and control groups) based on literacy level

| Group              | Control group |            | Addict |            |
|--------------------|---------------|------------|--------|------------|
|                    | Number        | Percentage | Number | Percentage |
| Primary school     | 2             | 1.98       | 6      | 6          |
| Junior high school | 8             | 9.7        | 28     | 28         |
| high school        | 39            | 6.38       | 48     | 48         |
| Two-year diploma   | 24            | 8.23       | 10     | 10         |
| BSc                | 25            | 8.24       | 7      | 7          |
| MSc & over         | 3             | 2.97       | 1      | 1          |

As you can see in Table 2, the largest number of participants in both the addict and control groups are at the diploma and high school levels. The lowest number of participants in both the addict and control groups are at MSc level and above. There is statistically a significant difference between the two addict and control groups in literacy level ( $p<0.001$ ).

**Table 3:** Comparison of sample individuals (control and addict) by occupation

| Occupation  | Control group |            | Addict |            |
|---|---------------|------------|--------|------------|
|   | Number        | Percentage | Number | Percentage |
| Unemployed  | 17            | 16.83      | 40     | 40         |
| Free  | 34            | 33.66      | 57     | 57         |
| Employee  | 27            | 26.7       | 3      | 3          |
| Student   | 22            | 21.78      | 0      | 0          |
| Total   | 101           | 100        | 100    | 100        |
| * Employee and student in combination $P<0.001$ , $\chi^2=53^*$ |               |            |        |            |

As Table 3 shows, the highest number of jobs in both the addict and control groups is for non-government job, and the lowest in both addict and control groups for the student job. There is statistically a significant difference between the two of addict and control groups in occupation ( $p<0.001$ ).

**Table 4:** Comparison of sample individuals (control and addicts) based on marital status

| marital status           |         | Single     | Married | Total |     |
|--------------------------|---------|------------|---------|-------|-----|
| Group                    | Control | Number     | 45      | 56    | 101 |
|                          |         | Percentage | 55.44   | 44.55 | 100 |
|                          | Addict  | Number     | 44      | 56    | 100 |
|                          |         | Percentage | 44      | 56    | 100 |
| P=0.10 , $\chi^2 = 2.63$ |         |            |         |       |     |

As Table 4 shows, the largest number of participant are married in both the control and addict groups, and there is no significant difference in the marital status of the two control and addict groups ( $P>0.05$ ).

**Table 5:** Comparison of different dimensions of quality of life in sample individuals (addicts and control)

| Scale                | Control |                    | Addict |                    | T     | Sig.  |
|----------------------|---------|--------------------|--------|--------------------|-------|-------|
|                      | Mean    | Standard deviation | Mean   | Standard deviation |       |       |
| Physical performance | 2.22    | 5.1                | 7.19   | 1.5                | 3.211 | 0.001 |
| physical role        | 15.2    | 3.1                | 55.1   | 3.1                | 1.81  | 0.007 |
| physical pain        | 15.3    | 0.1                | 9.2    | 1                  | 2.45  | 0.015 |
| general health       | 45.14   | 2.3                | 35.13  | 2.3                | 3.03  | 0.003 |
| Exuberance           | 45.12   | 7.3                | 8.10   | 7.3                | 2.046 | 0.015 |
| Social performance   | 15.7    | 1.9                | 5.6    | 9.1                | 3.49  | 0.001 |
| Emotional role       | 2.4     | 4.1                | 55.3   | 4.1                | 2.64  | 0.009 |
| Mental health        | 3.15    | 65.4               | 5.13   | 65.4               | 3.211 | 0.001 |

As you can see in Table 5, there is a significant difference between the control and addict groups in all subscales of quality of life. This means that the physical performance, physical role, physical pain, general health, social performance, exuberance, emotional role, and mental health of addicted individuals are lower compared to the control group.

### Discussion

As the findings showed, the average age of addicts is 31 years and the average age of control subjects is 29 years with an age range of 20 to 50 years. The slight difference in average age shows that the two groups will be similar in age. There was no significant relationship between drug addicts and control subjects in their parents' occupation and literacy, and the number of brothers and sisters. The case and control groups are similar in family status. The two groups did not show a significant difference in their marital status.

As for employment status, there was no significant difference between the two groups. The case and control groups are not similar in their employment status. Lack of a permanent job and an increase in the unemployment rate as a social phenomenon provide a basis for deviations, especially addiction. So lack of a job is a factor of relapse of drug use. Because someone who sees himself humble, goes towards drug use because of low self-esteem. Sometimes individuals, for earning a living, engage in a work that does not correspond to their physical strength and mental state. Drug addiction may cause unemployment, lack of motivation and even dismissal of individuals. (3) Control subjects and addicts in our study showed a significant difference in their literacy status, or putting in other way, case and control groups are not similar in literacy level.

Low education because of the reduction of opportunities for learning causes a tendency toward substance abuse. (23) As the results showed, there was a significant difference in physical performance; the addict group had a lower score in physical performance compared to the control subjects. Drug use has unpleasant physical consequences, which are muscle weakness, body pain, infection with the AIDS virus, hepatitis, various liver, kidney, and heart diseases, blood diseases, and premature death. (30) The result of our study in this dimension is consistent with that of Bizari et al. (19) and Katibai et al. (22) regarding the inferior quality of life in the physical dimension by drug addicts.

Two addict and control groups showed in this research a significant difference in the dimension of physical role. The addict group had a lower score in physical role compared to the control group. Because of several physical problems that arise in addicted individuals, there are naturally limitations in playing their role as a normal person in society. (30) The result is consistent with the study of Katibaei et al. (22) regarding the inferior quality of life in the dimension of physical role in drug addicts. Both addict and control groups showed a significant difference in the dimension of physical pain. Addicts had a weaker score in physical role compared to the control group.

Muscle weakness and physical pain in addicts because of physical effects that addiction causes seem obvious. (30) The result of our study is consistent with that of the study of Leonardo et al. (31) in the dimension of physical pain. Addicts and control samples showed a significant difference in health. The addict group was weaker than the control group in health.

Addiction is a physical and mental illness that, because of its progressive nature, endangers the health of the individual, family and society in all aspects of life. (6) Indeed, this great personal and social problem threatens and harms the health of the society socially, economically, politically and culturally besides the physical and mental complications. (8) The findings are consistent with those of Shams Esfandabad et al.'s research based on which the quality of life is low in addicts. (29)

The two addict and control groups revealed a significant difference in the dimension of social performance. The addicted group had a lower score in social performance compared to the control group.

Addiction can disrupt the role of the addicted person in most of the social tasks. Some social complications of addiction are isolation and lack of compatibility with the family, failure in performing family duties, negligence in work, leaving the job or dismissal, not accepting responsibility in the profession, conflict with the police and the law, committing violations and breaking the law, creating conflict, and membership in criminal groups. (32, 33)

The result of our study is consistent with that of Smith and Larson (27) based on the inferior quality of life in the dimension of social functioning by addicts.

The addicts showed a significant difference with the control group in the dimension of emotional role. The addicts scored lower in emotional role compared to the control subjects.

Controlling the management of emotions is a best effective method for individuals' mental health. Addicted individuals have had problems with this control because of the problems in their mental state; individuals' inability to manage emotions drives most of them to drugs.

The result of our research is consistent with that of Katibaei et al. (22) based on which the quality of life is low in the dimension of emotional role in drug addicts.

The findings reveal that the both addict and control groups showed a significant difference in mental health; the addict group was weaker in mental health compared to the control group.

Addiction has a very destructive and lasting effect on the psychological dimension where a person should manage his behavior, thoughts, emotions, feelings, interactions and mental reactions. Some psychological effects of addiction are aggression, inappropriate sexual behavior, euphoria, talkativeness, excitability, impatience, increased or decreased energy, increased or decreased alertness, psychomotor retardation, increased irritability, attention and concentration disorder, anxiety, temptation, isolation and depression, high expectations and psychotic symptoms such as hallucinations and delusions. (32) Seemingly, this is the reason for the difference.

The result is consistent with that of Qureshi et al.'s research on the low score of mental health in drug addicts. (23) and that of Hampton's. (21)

## **Conclusion**

The results of this study showed that addiction may lead to a decrease in the quality of life in different psychological and physical dimensions.

## **limitations**

It is noteworthy that the selection of only recovering addicts of addiction treatment centers seems to affect the generalizability of the results, while many addicts do not refer to addiction treatment centers.

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