

# The Effects of Buprenorphine on Sexual Satisfaction in Opiate Addicted People in the City of Noor

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**Abstract:** The purpose of this research was to determine the effects of buprenorphine on sexual satisfaction in opiate addicted people in Noor. The statistical population of the present study included all addicts referring to addiction treatment centers in the city of Noor in the second half of 2015. 60 subjects were selected using voluntary sampling available that they were assigned in the two experimental groups of 30 subjects and control group of 30 subjects tested by Larson's Sexual Satisfaction Questionnaire. The findings of the research were analyzed using descriptive statistics including (mean, standard deviation, minimum and maximum), and inferential statistics and covariance analysis were used for the analysis. The results showed that treatment of buprenorphine in addicts leaving the experimental group compared with the control group increased sexual satisfaction.

**Keyword:** Buprenorphine, Sexual Satisfaction, Addicts.

## Introduction

Marriage and family formation is one of the important issues that can have many effects in human life in terms of the growth and enhancement of personality and human perfection, as well as maintaining mental health and increasing efficiency (Mayerr, 2001). Marriage is a relationship that a person enters into by choosing to stay in that relationship for almost half a century. The men and women who get married must be able to adapt themselves to half a century of social change, growth and mutual change, otherwise, their marital relationship is likely to be difficult . Marital satisfaction is the most important and important factor for the sustainability of a common life. Marital satisfaction is a time when the marital relationship is matched to the expected situation. If couples can increase the level of satisfaction in marital life, they will protect the family from harm (Mohebbi et al., 2010; quoted by Hojjatpanah & Ranjbarkohan, 2013).

One of the key factors in assessing a person's quality of life in general and the quality and continuity of marital relationship is sexual satisfaction in marital relationship in particular (Fuentes & Iglesias, 2014). Sexual satisfaction is a component of human sexuality that is considered as the last stage of his sexual response cycle (World Health Organization, 2010).

Sexual satisfaction not only brings warmth and passion to couples, but also protects them from many disorders and illnesses (Paul, 2008). Substance abuse is one of the issues that affect marital satisfaction and sexual satisfaction in the family and among couples. In many people, addiction is considered to be a chronic disease due to repeated slipping, because of its adverse and unpleasant effects on the various dimensions of the life of the treatment addicts, has always been of great importance. To treat the drug dependence disorder, various methods are used to reduce the symptoms of the disease during this period, which may include pure opioid agonists, non-infectious symptomatic treatments, opioid antagonists, and antagonistic drugs.

Buprenorphine is 25-50 times stronger than morphine and provides analgesia and other effects related to the central nervous system, which is morphine-like in quality (Parviz Kazemi & Kamalipour, 2005).

Buprenorphine is a narcotic drug similar to morphine, codeine and heroin. It is used primarily for the treatment of drug addiction, but has other therapeutic benefits. Buprenorphine is a relative moiety receptor agonist, which means that although it is an opioid and can have certain effects and side effects of opiates such as euphoria And a respiratory dysfunction, but its maximum effect is less than full agonists such as heroin and methadone. Buprenorphine produces enough agonist effects in low doses to reduce opioid dependent individuals without experience of withdrawal symptoms. The effects of buprenorphine agonist increase linearly with increasing doses. It then reaches a constant level until a moderate dose, and then with increasing doses, the effect of agonists is not much. To this phenomenon is called "ceiling of effect". Therefore, buprenorphine has a lower risk of substance abuse, addiction and side effects compared with full agonists (Akbarzadeh Pasha, 2012).

In fact, buprenorphine can effectively inhibit the effects of full agonists in high doses and conditions, and if prescribed in the presence of a complete agonist in the bloodstream of the opioid dependent person, the symptoms of deprivation impose. Due to the negative effect of buprenorphine on the liver, oral intake is very low and its use in the form of sublingual is moderate. For the treatment of addiction, they are provided as sublingual pills. Buprenorphine produces less psychological and physical dependence on addicts compared to methadone compared to methadone. After 6 months of treatment with buprenorphine, libido increases and general satisfaction increases (Akbarzadeh Pasha, 2012).

Previous studies have focused on detoxification of buprenorphine in treating patients with substance abuse (Hafezi et al., 2004). However, regarding this point, the present study seeks to answer the question of whether buprenorphine affects sexual satisfaction in opiate addicts in the city of Noor?

## Methodology

The purpose of this research was to determine the effects of buprenorphine on sexual satisfaction in opiate addicted people in Noor. The statistical population of the present study included all addicts referring to addiction treatment centers in the city of Noor in the second half of 2015. 60 subjects were selected using voluntary sampling available that they were assigned in the two experimental groups of 30 subjects and control group of 30 subjects tested by Larson's Sexual Satisfaction Questionnaire. The instrument used in this study was Larsson Sexual Satisfaction Questionnaire (1998): Larsson's Sexual Satisfaction Questionnaire was introduced by Larson and colleagues in 1998. The questionnaire has 25 phrases. Its responses are 5 options and based on a Likert scale of 1 to 5. In the research of Shams Mofreh (2001), the validity and reliability of this test are reported 90% and 86%, respectively. In another study, the reliability of this questionnaire was reported using Cronbach's alpha coefficient for a 93% fertility group and 89% infertile group (Bahrami, 2007).

## Results

### Data analysis

**Table 1.** Mean and standard deviation of participants' sexual satisfaction score in pre-test and post-test by test and control group.

| The dependent variable | Group        | Pre-test |        | Post-test |        | Number |
|------------------------|--------------|----------|--------|-----------|--------|--------|
|                        |              | Mean     | SD     | Mean      | SD     |        |
| Sexual satisfaction    | Experimental | 94.07    | 6.595  | 103.07    | 6.475  | 15     |
|                        | Control      | 93.67    | 10.661 | 94.47     | 10.849 | 15     |
|                        | Total        | 93.87    | 8.713  | 98.77     | 9.807  | 30     |

As shown in Table 1, the mean and (standard deviation) of total sexual satisfaction scores in the pre-test phase are 93.83 and (8.713) and in the post-test phase 98.77 (9.807), respectively. Also, the mean and standard deviation of marital satisfaction for the experimental group in the pre-test are 94.07 and (6.595), and in the post-test, 103.07 and (6.475), and for the control group in the pre-test, 93.67 and (10.661) and in the post-test are 94.47 and (10.849). Descriptive results show that the mean of sexual satisfaction score increased in the post-test stages, after receiving buprenorphine, but did not change in the control group that did not receive the drug.

To investigate the research hypotheses regarding the efficacy of buprenorphine on marital satisfaction and sexual satisfaction of opiate addicts, covariance analysis was used. The covariance analysis test allows the researcher to examine the effect of an independent variable on dependent variables and to eliminate the effect of other variables. Prior to analyzing covariance, its hypotheses were first tested and approved. The required

assumptions for the implementation of the covariance analysis test (normalization, homogeneity of variances, regression line tilt homogeneity) were used. Then, the covariance analysis test was used and the results were presented in Table 2.

**Table 2.** One-variable covariance analysis (ANCOVA) on post-test scores of sexual satisfaction of test and control groups, with control of pre-test effect.

| Sources of changes | SS       | df       | MS | F        | Sig.    | Square root |
|--------------------|----------|----------|----|----------|---------|-------------|
| Post-test          | Pre-test | 2045.103 | 1  | 2045.103 | 291.289 | 0.0001      |
|                    | Group    | 505.792  | 1  | 505.792  | 72.041  | 0.0001      |
|                    | Error    | 189.564  | 27 | 7.021    | -       | -           |
| Total              |          | 295435   | 30 | -        | -       | -           |

As shown in the table above, the effect of treatment of buprenorphine on sexual satisfaction between the mean post-test of sexual satisfaction after removing the effect of pre-test was statistically significant in the two groups ( $F = 72.041$  and  $p < 0.0001$ ). Therefore, it can be concluded that treatment of buprenorphine is effective in increasing sexual satisfaction. The Eta squared value is equal to 0.627. This means that the treatment of buprenorphine caused 62.7% change in the rates of sexual satisfaction among addicts.

### Discussion and Conclusion

The results showed that treatment of buprenorphine in addicts leaving the experimental group compared with the control group increased sexual satisfaction. The results of the present research are consistent with the results of the studies of Anne et al (2016), Clark et al (2014), Nikbakht (2013), Taqavi (2013). Nikbakht (2013) showed that the treatment of buprenorphine in people with crack had a positive effect on their sexual function and had increased sexual desire and increased general sexual satisfaction. Kimia Qalam (2009) in a research showed that the use of buprenorphine as a type of drug therapy had improved sexual satisfaction and performance.

Arab Zouzani et al (2012) in a research entitled "a study on the cost-effectiveness of preservative therapy with buprenorphine compared with methadone in the treatment of opioid addiction" showed that both existing drugs were good drugs for the treatment of opiate addicts, and the differences between them were not significant. Generally, it can be said that the efficacy of methadone is better and costs a bit more if the cost of a buprenorphine is higher than methadone, but because it requires fewer days to follow, its effectiveness is better and improves the quality of life of individuals.

The treatment of buprenorphine, a drug therapy for the discontinuation of addiction, has been addressed through the replacement of buprenorphine with an addictive substance to control the withdrawal syndrome due to discontinuation of the drug, and in many cases, its efficacy during the avoidance of psychological state, mental health improves the sexual health and well-being of individuals.

Nikbakht (2013) believes that peculiar addictive substances are divided into two groups of narcotics such as opium and derivative proteins such as syrup, crack, etc., and stimulants such as cannabis, glass, amphetamines, x, and the like. Unfortunately, there is a false belief in our country that it is very good to use these drugs to increase sexual ability and desire and to treat early ejaculation. Some people also think that their physical pain can be reduced by the use of opium, while the use of these substances will in any way affect the sexual issues. What happens is that narcotics like opium have a sedative effect, resulting in a low sensitivity in the individual, and when this happens, sensitivity in the genital area is also reduced, and if a person has early premature ejaculation, the problem is resolved when he or she begins to use it and can increase the length of its sexual relationship. But, as a result of the use of these substances, anxiety will increase in the person and in order to be able to reach the same level, it will have to increase the amount of substance used and its frequency, consequently, it will depend and the problem of its early ejaculation will not be resolved and it also affects the secondary sexual problems.

In general, drugs are affecting individuals both physically and psychologically. In the psychological dimension, he shows his work both through the creation of the individual and through behavioral and communicative issues. In the short term, the use of substances by removing psychological anxieties gives the person a sense of self-esteem and creates the impression that the use of these substances has increased sexual desire, but in the long term reduces sexual desire and affects the individual and it is a substance that can be reduced to some extent by using alternative drugs such as methadone and buprenorphine.

**Conflict of interest**

The authors declare no conflict of interest.

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