Relationship between Perceived Stress and Major Depression in Methamphetamine Consumers visiting Mehrshad Addiction Treatment Center of Tehran

Zeinolabedin Mirchi1,2, Afsaneh Khajevand Khoshli1,2*

1Department of Psychology, Golestan Science and Research Branch, Islamic Azad University, Gorgan, Iran
2Department of Psychology, Gorgan Branch, Islamic Azad University, Gorgan, Iran

*Corresponding Author Email: khajevand_a@yahoo.com

Abstract

The aim of conducting this research is studying the relationship between perceived stress and major depression in methamphetamine consumers. The research method was descriptive-correlative. 180 individuals participated in this research by the use of convenience sampling. Data collection tools were perceived stress scale (PSS) and Beck depression inventory (BDI). Pearson correlation was used for data analysis. Results showed that there was a positive and significant relationship between perceived stress and major depression and perceived stress could predict depression.

Keywords: Perceived stress, Major depression, Addict.

Introduction

Addiction or drug dependence is a chronic and recurrent disorder that has deep social, psychological, physical and economical effects; and in addition to degradation of character it also has heavy costs for individuals, their families and the society. In Iran, drug abuse is recognized as one of the most important and most widespread concerns and preventable health risk (Ekhtyari, 2007). Drug addiction is defined as follows: endpoint of progressive loss of control over the behavior and obsessive drug abuse and continuing these behaviors despite the adverse consequences. Also drug addiction could be followed by lack of executive control over incompatible incentive habits (Belin, 2013). Also, addiction with its formal name which is drug dependence is repeated consumption of a drug or chemical material with/without physical dependence which has an effect on different aspects of performance of individual and results in significant disability of a high percentage of individuals.

Also, it proposes simultaneous detection of other diseases in 60 to 75% of patients suffering from drug-related disorders. Disorders such as anti-social personality, types of anxiety disorders, depression and suicide have the highest comorbidity and relationship with drug abuse and drug dependence (Imam, 2007). Different researches have also reported different psychological problems in individuals depended on drug abuse. For example, symptoms of psychosis, anxiety, depression, aggression, morbid fears, somatization, interpersonal sensitivity, obsessive-compulsive disorder, paranoia and stress are some of the problems shown in different researches related to drug dependence and drug abuse (Heydari, 2012). A group of psychologists believe that social factors related to human poverty have an effect on dependence of human beings to opiates and the addiction rate in low social/economic groups is higher.

Thus in a society addiction is the effect of stress and psychological pressures. Dr. Kaplan and Sadock consider heroin consumption as an anti-anxiety method for hiding the sense of low self-esteem, despair and disability in having control over the life situations. The role of peers and the social pressure in young environments are very effective on their tendency toward drugs. Individuals live in two worlds: 1-family, 2-peers. Adolescents need guidance, cooperation, trust, order, mutual understanding, compassion and love. Lack of each of these results in the individual’s tendency to people other than the family and finding that point in another person and it results in creation of tendency to friends and peers. Sometimes the high influence of peers on the adolescent’s life may be caused by lack of gaining the attention
from the family or due to the attractions of the group of peers; and from there the link between adolescents and their parents gradually weakens, and peers gain a sensitive role in their mental growth. Thus the first factor which results in attraction of adolescents to environments other than the family environment and house is lack of appropriate relationship between parents and individuals; and this is when the adolescents take the first step toward the group of peers and the base for deviance is provided at this point (Kaplan & Sadock, 2002). Depression is a terrible and annoying feeling. Physicians define depression as follows: sense of nostalgia and morbidity which lasts for at least two weeks; but of course this is different from feeling of mental pressure or sadness about something or a subject. It seems that usually depression occurs without any reasons. The person feels sad without knowing the reason. The activities that were normally desirable for him would not make him happy anymore. Even getting out of bed could become difficult. Signs of depression include: Feeling of depression in most of the times during day and night and almost every day; this sign in children and adolescents could be in the form of irritability and excitability; losing interest in activities that were formerly pleasant and desirable; High weight decrease or increase; sleep disorders or oversleeping, fatigue almost every day; feeling of worthlessness or guilt without any reason, problems in focusing and thinking, talking, moving slower than usual (Kaplan, 2003). Thus the aim of this research is studying the correlation between perceived stress and major depression in methamphetamine consumers visiting Mehrshad addiction treatment center of Tehran.

Methodology

The research method was descriptive-correlative. The statistical population included all methamphetamine consumers visiting Mehrshad addiction treatment center of Tehran in 2014 and the number was 200 individuals. Based on Morgan table 180 individuals were chosen as the research sample. Individuals who had the following characteristics participated in this research: age range of 18 to 55, suffering from substance (methamphetamine) dependence disorder, addiction period of minimum 2 years and maximum 20 years, without any medical or legal problems affecting the process of disease of the participants, not receiving psychiatric drugs (such as Benzodiazepines, any type of antidepressant or antipsychotic) for a period of more than two weeks before starting the therapeutic intervention. The independent variable was perceived stress and the dependent variable was major depression. At the research implementation stage, after giving the introductory explanations regarding the research measuring tools and aim of conducting the research, the answering method was fully explained to examinees. Regarding the ethical considerations, after gaining their testimonials, and providing necessary information, they were assured that the received information would be only used in this research and they would be protected from any sort of abuse. The following questionnaires were used for measuring research variables.

**Perceived Stress Scale (PSS 14):** This scale was designed by Cohen et al in 1983 and it has three versions of 4, 10 and 14 items used for measuring the general perceived stress during the last one month. It measures the thoughts and feelings regarding the stressful events, control, and dominance, dealing with mental pressures and experienced stress (Mahdavi, 2012). Also this scale surveys the risk factors of behavioral disorders and shows the process of stressful processes. The consistency reliability coefficients of the scale were achieved in a group of university students and a group of smokers by the use of Cronbach alpha and they were in the range of 84% to 86%. PSS was significantly consistent with life events, signs of depression and physical signs, efficiency of health services and anxiety. This scale is a good tool for measuring the general stress experience in different age groups. In this research the 14-item scale was used. In a research by Mahdavi, for determining the reliability of PSS two methods of Cronbach alpha and bisect were used and for the total questionnaire they were 0.84 and 0.85, respectively, which indicates acceptable reliability coefficients for the questionnaire (Mahdavi et al., 2012).

**Beck Depression Inventory (BDI):** BDI is designed for facilitating the quick implementation in clinical and research conditions. This inventory includes 13 items related to specific symptoms of depression. Designing the short form was based on the main study. This inventory includes 13 self-report items indicating the specific symptoms of depression. Each sentence of this inventory includes a 4-option scale designed in a 0 to 3 range. The maximum and minimum of scores is 39 and 0 and it is designed for measuring different symptoms of depression such as emotional depression, cognitive depression, motivational depression and physiological depression. Light Foot and Oliver (1985, quoted by Mahdavi, 2012) reported that the Cronbach alpha of short form of Beck inventory (13-item) was 0.87 and the retest reliability in a two-week interval was 0.90. Also in a research Rajabi (2005) surveyed the internal consistency and validity of the items of short form of this inventory in university students of Chamran University of Ahwaz. Based on analysis of main components two factors were achieved: first factor, self-negative emotion, explaining 43.9% variance and second factor, no-pleasure, explaining 8.6% variance of the inventory items. Cronbach alpha coefficient and split-half for the total inventory were 0.89 and 0.82 and the correlation coefficient between short form and 21-question form of BDI was 0.67. The internal consistency coefficient of bisection of short form of BDI after applying the corrected
Spearman-Brown formula for the total inventory was 0.82; and for self-negative emotion (first factor) was 0.82 and for no-pleasure (second factor) was 0.76 (Beck et al., 1974; quoted by Mahdavi, 2012).

**Results**

Kolmogorov-Smirnov test results showed that data distribution is normal (p > 0.05). Pearson correlation was used for data analysis. Table 1 shows that the correlation between perceived stress and major depression is significant (r = 0.9, p ≤ 0.00). Also, regarding the correlation coefficient between these two variables which is 0.90 it could be concluded that this correlation is significant and positive.

Table 1. Correlation between major depression variable and perceived stress of addicts (R Pearson).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>R Pearson</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major depression</td>
<td>2.17</td>
<td>0.9</td>
<td>0.00</td>
</tr>
<tr>
<td>Perceived stress</td>
<td>2.05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The predictability of depression by the use of perceived stress was analyzed by the use of regression. Results showed that perceived stress is a predictor of amount of major depression in addicts (Table 2, p ≤ 0.01).

Table 2. Regression analysis results.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived stress</td>
<td>0.055</td>
<td>0.10</td>
<td>0.24</td>
<td>10.53</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**Discussion and Conclusion**

The aim of conducting this research was surveying the relationship between perceived stress and major depression in methamphetamine consumers visiting Mehrshad addiction treatment center of Tehran. Results showed that the correlation between perceived stress and major depression in addicts is significant. As a result, there is a correlation between perceived stress and major depression in methamphetamine consumers. In order to explain this result it could be said that every day, human beings are exposed to unpredictable problems and they need to adapt themselves with those problems and this adaptation could have a negative or positive effect and it could impose specific mental pressures.

Although stress could have a physical, mental and social effect, it is the individuals’ perception of the problems that determines the influence and effect of stress on the personal life. If individuals have negative perceptions naturally they experience more negative stress and the negative perception of the individual could increase the amount of stress and with the increase of stress and negative perception and attitude the individual’s ability to positive aspects is ignored and the thinking (which means paying attention to positive and negative points of the problem) is lost and it results in depression.

Regarding the high amount of stress in addicts (fear of hangover, losing the family, job, friends, rejection of society) and restrictions on the ability to think (paying attention to negative problems) in these individuals and drug abuse as the only solution, it results in not having an appropriate attitude for life and due to the conditions happening because of this type of thinking they suffer from depression. Thus it could be concluded that individuals’ perception of type of stress has a significant effect on creation of depression. These findings are consistent with research results of Buffalari & See (2009), Drummond (2001), Ilgen et al (2008), Eblich et al (2003), Masoodinia (2010), Behrouzi et al (2012), Garland et al (2012), Prashyansorn et al (2010), Banna et al (2010), Goeders (92004) and Kaplan & Sadock (2002); and in all surveys there was a significant correlation between depression and perceived stress.

**References**


