

Original article

Comparison of primary maladaptive Schema in patients under methadone maintenance treatment and healthy people in MMT clinics

Mohammad Khademloo¹, Ghahreman Mahmudi^{2*}, Somayyeh Shafiee²

1. Associate Professor Social Statistical, Faculty of Medicine, Mazandaran University of Medical sciences, Sari, Iran

2. Islamic Azad University, Sari Branch, Sari, Iran.

*correspondence: **Ghahreman Mahmudi**, Islamic Azad University, Sari Branch, Sari, Iran. Email: moh.khademll@gmail.com

Abstract:

Introduction: The aim of this study was to Comparison of primary maladaptive Schema in patients under methadone maintenance treatment and healthy people in MMT clinics.

Methods: The study population consisted of all addicts and non-addicts under methadone maintenance treatment in MMT clinics in Sari formed of 200 people (100 people addicted and 10 normal men) were selected with available sampling procedure. Young schema questionnaire was used to collect data in 5 areas (areas of cuts and rejection, Impaired Autonomy and Performance domain, direction and other fields, hyper vigilance and impaired inhibition and field constraints) with 75 questions.

Findings: Face and content validity according to the standard tools of the sighting several professors and its reliability using Cronbach's alpha coefficient α ; 0.968 is obtained. To analyze the data, independent t-test was used. The results showed that, in the domains of basic incompatibilities between addicts and healthy subjects undergoing methadone maintenance treatment MMT clinic there is a significant difference.

Conclusion: in areas of cuts and rejection, Impaired Autonomy and Performance, mood, other orientation, vigilance and prevent excessive and disruptive limitations addicts under methadone maintenance treatment and healthy people, there was a significant difference and the average of all areas in the addicts were more than healthy people.

Keywords: Schema, methadone, addicts, maladaptive

Introduction:

Drug use and dependence is a chronic and recurrent phenomenon with serious injuries including physical, financial, social and family. Less phenomenon can be found as addiction, could threaten human societies. Inappropriate use of drugs is one of the health problems and social world today. Nations and governments around the world are faced with the problem of drugs and drug addiction, with the scope and scale of the risk that in comparison with a generation ago was incredible (1). Since addiction is one of the most important social issues, investigating the causes and factors influencing drug abuse is important. Substance abuse cannot be physical problems, mental or social appearance, we knew it must result from the interaction of several problems (2).

Several factors are associated with the onset and continuation of drug use, one of the most important factors in this regard, are maladaptive schemas. As cognitive infrastructure leading to irrational beliefs and have components of cognitive, emotional, behavioral. When activated, level of excitement to be published and directly or indirectly lead to psychological distress such as depression, anxiety, inability to work, substance abuse, interpersonal conflicts (3).

Early maladaptive schemas, patterns or themes that are immersive surround your relationship with the person or other people who are highly inefficient. Yang calls this scheme are as follows: abandonment, mistrust / abuse, social isolation, defectiveness / shame, failure, dependence /

incompetence, vulnerable to any person or illness, arrest / failure in animals, obedience, sacrifice, emotional inhibition, unrelenting standards, entitlement and self-restraint and self-discipline inadequate (4).

Schemas grow during childhood experiences of life as a model act for processing. Since the schemes are relatively stable and its stability, as confirmed by constantly searching and could not make an individual more vulnerable to psychological distress. EMSs can arise through primary aversive experiences and later in similar situations provoke a response that had appeared in the past. It is thought that drug abuse is one of the individual coping strategies to avoid the negative effects of EMSs applies motivated. The goal of schema therapy is to alleviate individual EMSs (5).

So the main question is: "Is here differences between basic schema in patients under methadone maintenance treatment and healthy people in MMT clinics? The concept of schema is he base of cognitive theory about psychopathology and psychotherapy forms (6).

Misbehaviors in response to the schema created and then later by schemas are excited. Yang believes early maladaptive schemas are the deepest level of understanding and long-term fixed pattern that emerged in childhood and continue through adulthood. They are largely inefficient and basic role in patients' experiences and the experiences of subsequent influence on the process. As well as the way they think, feel and function of

patients or how to communicate with others are important (7).

Early maladaptive schemas and maladaptive procedures that patients often learn how to deal with underlying chronic disorders, such as substance abuse, depression, anxiety and psychosomatic are. Necessity dictates that in this study to compare early maladaptive schemas in healthy and people taking drug methadone maintenance treatment.

Methods:

This study was descriptive research. Patients under methadone maintenance treatment and healthy people in MMT clinics were included in his investigations. Of 200 people (100 people addicted and 100 normal men) were selected with available sampling procedure.

Young Schema Questionnaire was used for collecting data. The questionnaire was designed in 1998 by Yang and has 75 questions. These questions include 5 areas (areas of cuts and rejection, Impaired Autonomy and Performance domain, other fields of orientation, field of too much vigilance and impaired inhibition and area constraints) And has 15 subscales (emotional deprivation, rejection / abandonment, mistrust / abuse, social isolation, defectiveness / shame, failure, dependence / incompetence, vulnerable to any person or illness, arrest / failure in animals, obedience, sacrifice, emotional inhibition , unrelenting standards, entitlement and self-restraint and self-discipline enough) on a 6-point scale (totally wrong, wrong almost more true to false, some true, somewhat true very true)

designed And in order from 1 to 6 scored. 5 questions in this questionnaire measure a schema.

To obtain each subscale in dysfunctional schemas, the average score is calculated for each 5 items. If the average score in each subscale higher than 3, which scheme would be inefficient?

Researchers assess the reliability of the questionnaire by Cronbach's alpha coefficient.

Descriptive statistics: for Descriptive statistics frequency, frequency percentage, mean, standard deviation, charts and tables have been used.

Inferential statistics: inferential statistics Kolmogorov-Smirnov test for normality of data distribution and independent t test were used to examine the research hypotheses.

Findings:

The study population included 100 addicted and 100 normal men. Tables show that 1; 5.12% of the sample were in less than 30 years age group, 48.5 per cent in the age group between 30 and 40 years, 24.5% in the age group between 41 to 50 years and 14.5 percent were in the age group over 50 years.

Table 2 shows that 3 percent of the sample illiterate, 11.5% had primary education , 5.8 percent of traffic, 29.5% of diploma, associate degree 27.5 percent, 15.5 percent license, 5.4 percent have a bachelor's and a master's degree and higher.

Table 3 indicate 9% of the sample (drug addiction time) has less than 5 years, 37 percent have between 5 to 10 years, 24%

between 11-15 years and 30% are over 20 years history of addiction.

Table 4 indicates 51% of the sample (addicts), had opium consumption, 30 percent glass and 19 percent crack.

Early maladaptive schema in addicts and non-addicts had average of 206.19 and 160.52. This indicates that the average initial schemas in non-addicts were less than addicted. The averages of all initial schemas, in the all addicted group were higher than non-addicted.

The data followed a normal distribution for inferential analysis using parametric statistical tests.

Statistical analysis revealed that there was a significant difference among Cuts and exclusion among addicts in methadone maintenance treatment and healthy people.

There was a significant difference among Impaired Autonomy and Performance addicts in methadone maintenance treatment and healthy people.

There was a significant difference among the orientation addicts in methadone maintenance treatment and healthy people.

There was a significant difference among in the field of vigilance and prevent excessive addicts under methadone maintenance treatment and healthy people

There was a significant difference among various restrictions addicts in methadone maintenance treatment and healthy people.

Also, a significant difference was observed among in early maladaptive schemas addicts under methadone maintenance treatment and healthy people.

Discussion:

According to the findings of research, the neonates whose mothers have consumed dairy products, bread and cereals, fruit and vegetables and meat and legumes during pregnancy, have higher weight. Based on a similar study in 2009 Kahnemoui Aghdam et al carried out a research entitled the relationship between mother's body mass indicator before pregnancy and weight of born neonate in Rasht Alzahra hospital (Kahnemoui Aghdam et al, 2009). The findings of this study show the importance of the effect of weight before pregnancy and mother's nutrition on the neonate's weight at birth; so it seems that the emphasis will be on nutritional intervention, so that the maternal nutrition status before pregnancy be improved; the nutritional consultation with the mother is recommended on the delay in neonate's growth.

The present research showed the neonates whose mothers have consumed multivitamin during pregnancy have higher weight. According to the sample under study (because there did not exist in sample any mother who did not consume iron and folic acid tablets) we cannot ignore and reject the impact of consumption of iron and folic acid tablets as two variables in respect of previous studies. In examining the relationship between taking weight with the use of supplements in pregnancy and the weight at birth, Kouhdani et al (2009) indicated that the use of food additives is of impact on neonate's weight (Kouhdani et al, 1388). Therefore, it seems that taking supplements plays a very important role in the growth and health of the neonate as well as mother herself. Pregnant mother should begin to take multivitamin, folic acid and

There was a significant difference among Cuts and exclusion among addicts in methadone maintenance treatment and healthy people. In other words, disconnection and rejection scores in addicted were more than normal subjects. This finding is consistent with research results from, Wang et al. (8), Brummett, (9), and Decouvelaere (10) is the line.

To explain these findings can be said that the high scores of addicts than in healthy controls in the area of cuts and rejection that includes EMSs (emotional deprivation, exclusion / triggered no-confidence / abuse, social isolation and defectiveness / shame) and this Show that these maladaptive beliefs regarding lack of support and guidance of the people in life, lack of trust in others and extreme pessimism towards those around , abandonment and alienation from others and lack of utility experience. These findings reflect association of psychodynamic about drug addiction represents a major deficiency that affects growth and a regulatory crackdown.

There was a significant difference among Impaired Autonomy and Performance addicts in methadone maintenance treatment and healthy people. In other words, the average scores in the area of autonomy and impair performance in the addicted group was more than normal subjects.

This finding was in consistent with results of Wang et al. (2010), Brummett, (2007), and Decouvelaere (2002) is the line. This shows the higher scores of addicts than in healthy controls in the area of autonomy and impaired performance of EMSs (failures, dependence / incompetence, vulnerable to

any person or illness, arrest / failure in animals), indicate The maladaptive beliefs in the context of their feelings of inadequacy and helplessness, the sense of victimization and loss of individuality experience. Traumatic childhood experiences and the exclusion of environmental causes that children are expected to harm others.

There was a significant difference among the orientation addicts in methadone maintenance treatment and healthy people .In other words, the average scores in orientation in addicts was higher than in healthy individuals.

This finding is consistent with results of preceding studies Wang et al. (2010), Brummett, (2007), and Decouvelaere (2002) is the line. To explain these findings can be said that the high scores of addicts than in healthy controls in other areas, including EMSs orientation (obedience and sacrifice) show That families who have supported orientation in children, the learn the desires, feelings and responses o others is too important. This model leads to the formation of schemes such as obedience, sacrifice and selflessness.

There was a significant difference among in the field of vigilance and prevent excessive addicts under methadone maintenance treatment and healthy people. In other words, the average scores in the field of vigilance and prevent excessive in addicts was higher than in healthy individuals. This finding is consistent with results of Wang et al. (2010), Brummett, (2007), and Decouvelaere (2002) is the line.

There was a significant difference among various restrictions addicts in methadone maintenance treatment and healthy people. In other words, the mean scores of the various limitations on the scope of addicts was higher than in healthy individuals

This finding is consistent with results of preceding studies Wang et al. (2010), Brummett, (2007), and Decouvelaere (2002) is the line.

Shaghaghly F et al examined 81 addicted and 90 non-addicted men. They revealed there were significant changes between early maladaptive schemas and attributional styles in the two study arms. Like with our study, they concluded that addicts experience high levels of early maladaptive schemas. They had a more pessimistic attributional style (11).

There was a significant difference among in early maladaptive schemas addicts under methadone maintenance treatment and healthy people. In other words, the average scores in early maladaptive schemas were more in addicts than in healthy individuals. This finding is consistent with results of Wang et al. (2010), Brummett, (2007), and Decouvelaere (2002) is the line. In this regard, a recent paper has indicated that Knowledge on the distinctions of early maladaptive schemas, attachment styles, and coping styles in substance abuse objects could help the physicians to provide more useful therapies leading to provide behavior modification (12). Some investigations have reported that addicted individuals had insecure attachment and ambivalent styles.(13,14,15,16).

Limitations of the study

- Limitations under the control of the researcher
- Limiting the population of addicted and non-addicted of city
- Limited Data were collected through questionnaires.
- The limited sample

Limitations out-of-control researcher

- Lack of cooperation from some subjects
- The impact of differences in perception between the subjects answered questionnaires about their concepts.
- Low awareness of the importance and necessity of research subjects.

Conclusion:

According to the non-intellectual foundations of life are formed at an early age, it seems that maladaptive schemas play a major role in people's vulnerability Due to the growth of this fundamental cognitive structures rooted in childhood experiences and interactions with the child's first parents contribute to their development.

References:

1. Rush, B. R., & Wild, T. C. (2003). Substance abuse treatment and pressures from the criminal justice system: data from a provincial client monitoring system. *Addiction*, 98(8), 1119-28.
2. National Institute of Drug Abuse. (2007). Science – based prevention programs and principles. Substance Abuse and Mental Health Services Administration Center for Substance Abuse Prevention. www.samhsa.gov.
3. Yang, J., McCrae, R.R., Costa, P.T., Jr., Dai, X., Yao, S., Cai, T., & Gao, B. (1999). Cross-cultural personality assessment in psychiatric populations: The NEO-PI—R in the people's

Republic of China. *Psychological Assessment*, 11(3), 359-368.

4. Yousefi N, Etemadi O, Bahrami F, Ahmadi S A, Fatehi zadah M A. Comparing Early Maladaptive Schemas Among Divorced and Non-divorced Couples as Predictors of Divorce. *IJPCP*. 2010; 16 (1) :21-33

5. Roth, A., & Fonagy, P. (2005). *What works for whom? A critical review of psychotherapy Research* (2nd ed.). New York and London: The Guilford Press.

6. Young, J., Klosko, J., & Weishaar, M.E. (2003). *Schema therapy: A practitioner's guide*. New York :The Guilford Press.

7. Young, J.E. (2005). *Young Schema Questionnaire–Short Form*. New York: Schema Therapy Institute.

8. Wang, C.E., Halvorsen, M., Eisemann, M., & Waterloo, K. (2010). Stability of dysfunctional attitudes and early maladaptive schemas: A 9-year follow-up study of clinically depressed subjects. *J Behav Ther Exp Psychiat*; 41(4), 389-96.

9. Brummett, B.R. (2007). *Attachment style, early maladaptive schemas, coping selfefficacy, therapy alliance and their influence on addiction severity in methadone - maintenance treatment* . NewYork: Fordham University Press.

10. Decouvelaere, F., Graziani, P., Gackiere-Eraldi, D., Rusinek, S., & Hautekeete, M. (2002). Hypothesis of existence and development of early maladaptive schemas in alcohol-dependent patients .*Journal de*

therapiecomportementale et cognitive, 12 (2), 43-48.

11. Shaghaghy F, Saffarinia M, Iranpoor M, Soltanynejad A. The Relationship of Early Maladaptive Schemas, Attributional Styles and Learned Helplessness among Addicted and Non-Addicted Men. *Addict Health*. 2011 Winter-Spring;3(1-2):45-52.

12. Seyed Mehdi Hosseinifard, Narjes Kaviani. Comparing the Early Maladaptive Schemas, Attachment and Coping Styles in Opium and Stimulant Drugs Dependent Men in Kerman, Iran. *Addict Health*. 2015 Winter-Spring; 7(1-2): 30–36.

13. Andres F, Castanier C, Le SC. Attachment and alcohol use amongst athletes: the mediating role of conscientiousness and alexithymia. *Addict Behav*. 2014;39(2):487–90. [PubMed]

14. Caspers KM, Cadoret RJ, Langbehn D, Yucuis R, Troutman B. Contributions of attachment style and perceived social support to lifetime use of illicit substances. *Addict Behav*. 2005;30(5):1007–11. [PubMed]

15. Olsson CA, Moyzis RK, Williamson E, Ellis JA, Parkinson-Bates M, Patton GC, et al. Gene-environment interaction in problematic substance use: interaction between DRD4 and insecure attachments. *Addict Biol*. 2013;18(4):717–26. [PubMed]

16. Mortazavi Z, Sohrabi F, Hatami HR. Comparison of attachment styles and emotional maturity between opiate addicts and non-addicts. *Annals of Biological Research*. 2012;3(1):409–14.

Tables and Charts:

Table 1. Demographic distribution of study population

Age(ear)	addicted	healthy	total	percent
Less than 30	17	8	25	5.12
30 o 40	48	49	97	5.48
41 o 50	19	30	49	5.24

More than 50	16	13	29	5.14
total	100	100	200	100

Table 2. History of education in this study

	addicted	healthy	total	percent
illiterate	6	-	6	3
primary education	23	-	23	5.11
traffic	17	-	17	5.8
diploma	37	22	59	5.29
associate degree	11	44	55	5.27
license	4	27	31	5.15
bachelor's and a master's degree	2	7	9	5.4
total	100	100	200	100

Table 3. Addiction history based on years

Addiction history	number	percent
Less than 5	9	9
5 to 10	37	37
11 o 15	24	24
More than 15	30	30
total	100	100

Table 4. prevalence of type of substances abuse

	percent	number
opium	51	51

glass	30	30
crack	19	19
total	100	100