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## Comparing psychological disorders in addicts treated under NA Association and TC Centers

Safoura Jamshidi<sup>1</sup>; \*Mohammad Javad Asghari Ebrahimabad<sup>2</sup>; Maryam Sadat Fakhri<sup>3</sup>

<sup>1</sup>MS. student in general psychology, Ferdowsi University of Medical Sciences, Mashhad, Iran

<sup>2</sup>Assistant professor, Department of Psychology and Educational Sciences, Ferdowsi University of Medical Sciences, Mashhad, Iran

<sup>3</sup>Ph.D. student in consultancy, Ferdowsi University of Medical Sciences, Mashhad, Iran

### **Abstract**

**Introduction:** Substance abuse is a widespread issue in the present era turned into a social and sanitary problem as to its increasing variety and a multilateral and suitable consideration is required to prevent and solve this problem. Therefore, the present study attempts to compare psychological conditions of personality disorders in addicts treated under NA association and TC centers.

**Materials and Methods:** Research method is causative-comparative and the sample includes 213 individuals (107 clients of NA association and 106 clients of TC centers) in Mashhad city selected by convenience sampling method during first second half of 2017. They fulfilled two demographic questionnaires and Millon Clinical Multiaxial Inventory.

**Results:** Findings obtained from the analysis of comparing two independent groups showed that NA group had better conditions than TC clients group in terms of psychological and personality disorders and they had significant difference statistically ( $P<0.05$ ).

**Conclusion:** It seems that self-help and protective groups of NA association are more qualified in decreasing psychological disorders.

**Keywords:** Addicts, Personality disorders, Psychological disorders

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\***Corresponding Author:** Department of Psychology and Educational Sciences, Ferdowsi University of Medical Sciences, Mashhad, Iran

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**Introduction**

Addiction is a phenomenon dated back to long ago in human societies and currently it is still expanding despite scientific advances and indisputable increase of people's knowledge and awareness and many are affected each year. Substance abuse is one of the four global crises of the third millennium and at the top of social threats and harms and one the most tragic problems of today's societies challenged most societies and its effect on emerging other social harms has objective representation and it is moving from single-sex to dual-sex condition (1).

Addiction has become a social problem for today's society due to emergence of new narcotic substances and psychedelics, changes in routes of administration towards more destructive routes, its rising outbreak extent, and substance availability (2). It not only challenges the consumer, society, and its health but it paves the way towards moral and mental corruption which can have serious consequences for the health condition of the consumer and also all the community. Some consequences of substance use are disturbing psychological balance and they lead to anxiety, aggressiveness, constant stress, feeling of incompetence and loneliness, sleep disorder, different disease and mental disorders among addict persons (3-5). Also, other consequences of substance abuse and addiction are family problems, family relation limitation, problems in upbringing children, violence in family, downfall of social and economic culture level in the family, divorce expansion, and decline in marriage rate (6-8). In addition, when someone turns into a sole consumer, it will result in lack of responsibility towards the family and society, superficiality of social relations and avoiding strong emotional relations, offense and crime spread, outbreak of epidemics such as AIDS and hepatitis, depriving the future generation from correct upbringing and creating fake jobs, high costs of drug administration,

treatment and maintenance cost of addicts, decrease in work efficiency, and costs spent to confront the entrance of substance to the country (9,10).

Most researches in the field of substance use define personality factors as an important factor in consumption. Mental and emotional breakdown, types of personal disorders and mental illnesses, lack of ability to say "no" to others, self-deficiency and sometimes false pride, stubbornness and achieving illogical desires lead the individual towards change and variety and make the ground for addiction (7). In fact, many addicts come towards this direction due to personal problems and issues. Numerous studies have shown characteristics such as neurosis and anti-social personality in this group (9). Pleasure seeking and excitement seeking are two items often observed among people. High excitement seeking and tendency to use substances are studied in different researches and this relation is approved. People who are high excitement seekers try to find new and complex experiments and take different actions to satisfy them. Sometimes they turn to exciting sports which are based on social values and others follow them. Some try to use substance and experience different administration routes (1,8).

Treatment is usually discussed in issues related to addiction. Bolton believes that too much attention is given to pharmaceutical treatment of addicts while mental health aspects are underestimated. Results of different researches show that mental health maintenance is one of the most important requirements of addict people (11). Many topics are covered in studies performed about methods and ways of drug abandonment by different groups and organizations and important researches about self-help groups as one of the ways of substance avoidance have been performed in recent years and there is no doubt that these groups are effective and useful for those participating in these sessions (12). Activities and participation

of non-governmental organizations in social arena is the most important step of these groups. Camps, clinics, and institutions which are either related to an organization or work independently to help addicts abandon the substance abuse. Organizations such as Narcotics Anonymous (NA) and Therapeutic Community (TC) centers are considered as options against addiction problem and each one has its own special instructions. TC is like a lively and dynamic village. Main elements of this pattern are social structure and relation which its main purpose is to send the individual back to the society. TC environment is designed in a way to make the individual familiar with new values and styles of life and help him/her to become separated from the previous social and psychological physical environment. Physical, mental, and behavioral detoxification is necessary in this recovery process. Therefore, not only individuals should recover from pharmaceutical-mental effects of substances, but they should be separated from people, places, and everything related to substance use. Also, NA groups are those groups formed by the addicts themselves to support each other, speak with each other, guide each other, and present solutions. These groups have no therapist and the addicts themselves run them. The responsibility of the individual for the addiction is emphasized in these groups. Everyone having the tendency to abandon substance use can join this association. This membership has no rule and condition and every addict can join the association regardless of his/her substance type, race, religion, sex, and financial situation. Meanwhile, not only addicts, but everyone who feels he/she has a problem with substances can join this group (11). Therefore, it can be said that each treatment method may have different effect on treating substance abusers. Crime preventions and United Nation Office for Drug Control and Crime Prevention estimate that there are 200

million (5% of total population) substance consumers aged between 15-16 years old around the world of which 16 million (4%) are opium substance consumers and 11 million consume heroin. Substance users are estimated to be about 1.8 to 3.3 million in Iran (4). Substance abuse is a serious and growing public health issue so that substance abuse and public health service office has estimated that 25.4 million people are using pain killers in an unspecialized way between 2002 and 2013 and illness control and prevention centers have reported that 18893 deaths are recorded due to pharmaceutical overdose (13). Also, psychological and social consequences of substance abuse are irrecoverable. Therefore, it is necessary to consider the issue of addiction and substance abuse seriously. That is why the present study attempts to compare psychological disorders of those treated under NA and under TC centers so it can be clarified whether there is a difference between clients of TC centers or NA group in terms of some personality disorders and symptoms of some psychological disorders such as depression, somatization, and anxiety.

#### **Materials and Methods**

This study has practical purpose and its method is causative-comparative type. Statistical population included males and females of TC centers and NA association which 213 individuals were selected based on the research essence and number of variables (causative-comparative) using convenience sampling method. First group included 107 clients of TC centers and the second one had 106 clients who were members of NA association. Inclusion criteria suggested that those who were present at least for one month in the given camps and centers and did not use substance would be included. Minimum education level was primary school degree and they had no certain physical illness. Clients filled out the form of "consent for research" in terms of moral aspects after

holding the briefing session to complete research questionnaires.

Research instrument

A) *Demographic Questionnaire:* Researcher-made questionnaires were used to collect demographic information. Some questions were open-ended. Two forms were used which were different in some questions as these two experiment groups had some different characteristics.

B) *Millon Clinical Multiaxial Inventory:* Main version of this test was presented by Theodor Millon in 1977 and it has been revised twice since then. The present version, i.e. Millon 3, includes 175 yes/no items which measures 14 personality clinical patterns and 10 clinical syndromes and it is designed for adults above 18 years old. Generally, test validity was 0.78 after the assessment performed by Millon et al. and its correlation with 0.75 MMPI was reported. Millon reported alpha coefficients in range of 0.66-0.90. Alpha coefficients were reported in the range of 0.85-0.97 in Iran (12).

In addition to descriptive statistics, comparison of independent groups averages were used for two groups of clients in TC centers and self-help teams of NA associations to compare results related to psychological variables.

**Results**

Number of research participants was 213 individuals (106 individuals from TC centers and 107 members of NA association teams) which were selected from TC centers and NA teams through available sampling method. Average age of participants from TC centers and NA team were 23.33 and 24.36, respectively. Minimum and maximum age of participants from TC centers were 17 and 63, respectively; there features for participants of NA association teams were 20 and 55, respectively. There was no significant difference between these groups in terms of age.

**Table 1.** Descriptive findings of psychological and clinical disorders variables

Variables	Group	M	SD
Physical symptoms	NA	8.32	5.03
	TC	10.96	6.01
Anxiety symptoms	NA	11.34	6.03
	TC	14	6.40
Depressed personality	NA	34.15	59.5
	TC	54.12	45.6
Anti-social personality disorder	NA	41.15	75.4
	TC	83.16	77.4
Borderline personality disorder	NA	19.23	5.42
	TC	20.72	5.59
Dysthymia symptoms	NA	16.20	5.36
	TC	18.66	6
Acute depression symptoms	NA	11.71	7.49
	TC	16.74	9.03

Table 1 compares personality disorders in two groups of NA and TC. As it can be seen, members of NA team had lower

scores than members of TC group in terms of average of personality disorders and the greatest difference was in anti-social personality disorder.

**Table 2.** Comparing symptoms of clinical and psychological disorders in two clients groups of TC centers and NA associations

Variable	T score	Df	P
Physical symptoms	3.43	203	0.001
Anxiety symptoms	3.06	203	0.003
Depressed personality	3.33	203	0.001

Anti-social personality disorder	2.093	103	0.030
Borderline personality disorder	1.93	103	0.550
Schizoid personality	3.26	203	0.001
Acute depression	4.33	203	0.0001
Dysthymia	3.03	103	0.003

According to table 2, comparing average of psychological and clinical disorder symptoms of two client groups of TC centers and NA association showed that there is a significant difference between them. Therefore, clients of TC centers had significantly higher scores in all psychological disorders scales compared with NA group and acute depression had the highest significant difference ( $P=0.0001$ ). However, there was no significant difference between the score of borderline personality in two groups of TC centers and NA association ( $t=1.93$ ,  $P=0.55$ ).

### Discussion

The purpose of the present study was to compare psychological condition of psychological and personality disorder levels of clients in TC centers and NA association. Results showed the condition of psychological and clinical disorders of NA association clients were better than clients of TC centers. Findings of this research are in line with similar works (14-18). Being a member of NA self-help groups is a way approved its success in persistence of clean period, improving life quality, and strengthening recovering addicts' will (19-21). In addition, a study (21) showed that constant participation in NA association is related to life quality and also it brings mental and social health. It seems Narcotics Anonymous Association has been able to achieve a great success in physical and mental recovery of its members by 12-step spiritual plans and strengthening individuals' spirituality and also strong and effective social support of members for each other to avoid substances and change their attitude for solving life problems. It can be said that NA association encourages members to share common experiences and presents

them similar patterns through extensive social support and providing favorable interpersonal relations. Individuals who are under treatment in this association can find new coping styles to deal with their problems and be more positive about definite treatment by comparing themselves with similar cases (17).

In addition, it can be said that the reason of NA association success is that this association is formed by addicts themselves to support each other, talk, guide, and present solutions. These groups have no therapist and addicts run them. Individuals who were addicts and are in their long-term abstinence period and have experienced all conditions and steps and have been able to abandon addiction are model and leader of other members. Participation in groups of NA association is an important factor in making people responsible for their own treatment and brings their persistence for treatment continuity as participation creates a supportive social context based on sympathy and understanding abandonment problems and increasing the interaction of people having similar conditions. This result shows that attending NA association group provides more suitable situation to cope with treatment side effects such as physical pain and restrictions resulted from excitement. Also, it is possible to hold session for each member at every time of the day and night and even members can participate in sessions many years after becoming abstinent. Therefore, it seems that the main character of NA association is providing social support and patients helping each other cause people to benefit from sympathy of similar individuals as well as to exchange experiences and to find suitable approaches for coping with mental and physical pressures of treatment period.

Thus, individuals attending NA associations take the responsibility of their own treatment by attempting to abandon substance and hoping to reach the success experienced by role model and they will not need any alternative material. Therefore it can be said that like other studied (22,23), it is approved that participating in discussion groups and going through 12-step plan of NA association is along with energy and happiness increase resulted from social support, provides a better self-concept and leads to self-esteem, self-control, and consequently to more capacity for resistance and treatment persistence. So, these individuals are more capable of coping with anxiety, depression, and stress and preventing them compared with methadone treatment group. Effectiveness of NA association method on life quality compared with methadone treatment method is approved by findings of other researches about membership duration in Narcotics Anonymous. A research (21) shows the negative relation between depression and physical pain with membership duration in NA group and on the other hand, more membership duration in this group is related with more public health and excitement consequences. In

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other words, membership duration in NA association is related with lower depression and physical pain and more public health and excitement role.

There were some limitations such as problems in accessing NA community due to being anonymous, low cooperation of NA members due to commitment to being anonymous, low education level of clients. Performing this research again in two study group in a time interval of one year based on continual assessment and comparing NA with behavioral cognitive therapy in two separated groups are recommended.

### **Conclusion**

There are two common methods for treating substance addiction, i.e. community-based method of NA group and treatment using methadone preservative in TC, which community-based method is more suitable for improving life quality and lowering psychological disorders and it can be used as suitable treatment method.

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