



Research Article

ISSN : 2277-3657
CODEN(USA) : IJPRPM

Drug Abstinence Self-Efficacy among Addicted men who stoped taking drugs and Participating in Therapeutic Community, Narcotic Anonymous and Methadone Maintenance Treatment Groups in Ahvaz City,Iran

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ABSTRACT

The present study aims to comparatively investigate the Drug Abstinence Self-Efficacy (DASE) among addicts who stoped taking drugs and participating in Therapeutic Community(TC), Narcotic Anonymous(NA) and Methadone Maintenance Treatment (MMT) Groups in Ahvaz, Iran. This was an analytical study conducted on the abandonedaddicted men participating in TC, NA and MMT Groups in Ahvaz City/Iran. A total of 141 participants (47 in each group) with available sampling method took part in this study. The Drug Abstinence Self-Efficacy(DASE) was used. ANOVA and Turkey were used for statistical analysis. Outcomes showed that the Drug Abstinence Self-Efficacy among addicts participating in NA was significantly higher than that reported by MMT ($P < 0.026$) and there is no significant difference between TC group with NA and MMT groups. Drug Abstinence Self-Efficacy among addicted men who stoped taking drugs and participating in TC, NA and MMT is different and NA sessions must be recommended for increasing it.

Keywords: Addicts, Drug Abstinence Self-Efficacy, Therapeutic Community, Narcotic Anonymous Self-Help groups, Methadone Maintenance Treatment

INTRODUCTION

According to the reports of UN Office of Drugs and Crime (2010), Iran has the largest consumption of opium and heroin, and more than two million people (three percent of the population) are addicted to use substances like opium and cannabis and psychoactive tablets illegally(1).

The number of relapses is very high among the addicts who quit and almost 80% of subjects who were discharged with recovery from addiction treatment centers, returned to the substance(2, 3). A survey has shown that 65% of

treated addicts could not stay more than two years clean and 69% of recurrences occurred within the first year after leaving(4). Most recurrences of addiction occur one month after the end of the detoxification period(5). Different factors cause clean addicts to return consumption of the drug, such as the environmental, social and cultural factors, pain, etc(6). However, the factor which can affect the relapse more is the level of self-efficacy of addict(7). Albert Bandura (1977) defines self-efficacy as beliefs about the successful implementation of the behaviors required to get optimum results(8). During recent years non-medication based techniques including physical and herbal agents have been dramatically developed for the treatment of mental disorders (9-12).

Many studies have demonstrated a strong connection between self-efficacy and relapse after treatment of various materials. According to Bandura (1986), people who have essential skills and coping efficacy have more likely higher resist in high-risk situations and drugs consumption(13-15). In some studies the self-efficacy has been approved as an indicator to predict the likelihood of reuse of materials (13, 14, 16, 17). Self-efficacy is the original concept of change of many patterns and behavior theories and has been considered in many studies of the relationship between self-efficacy and health behaviors(18). In a research, the direct relation between the self-efficacy and the level of some indicators of life quality in addicts has been extracted(19). In other researches, the inverse relationship between the self-avoiding and depression of treated addicts has been revealed(20). There are different programs for the treatment and rehabilitation of drug-dependent patients among which the groups of Narcotics Anonymous, Therapeutic community approach, and also drug treatments such as maintenance treatment using methadone that reduces the symptoms of leaving and the craving to consume(21, 22). Narcotics Anonymous is a nonprofit organization that is active regardless of the state or organization; internationally with the slogan of "one addict helping another". In these groups, the addicts who quit pass the twelve spiritual stages and relying on a superior force, try to avoid the reuse of materials and with the help of guides who are clean addicts resist the temptation to use the material (23). Therapeutic community was developed in the early 1960s with the view that addiction is a disorder that affects all aspects of addicts and makes severe problems of drug abuse. The main objective of therapeutic community, is changing the lifestyle of addicts so that in this regard medications are not used while the help of psychiatrist, psychologist, social worker are applied(21, 24). In the Methadone Treatment, an alternative is created for narcotic substance using the methadone and over time with the doctor opinion, addict reduces the daily dose of methadone consumption to zero(22). Effective coping styles increase self-efficacy in the management of hazardous situations and thereby reduce the risk of recurrence(25). Substance abusers learn a clear vision of how to change the passing therapy sessions and drawing on lessons learned during the therapy sessions. They have to know their status and ability to assess them when faces with the stressors that increase tend to substance abuse. This awareness and the ability increase in evaluation of themselves and controlling the environment cause them to place closer to self-efficacy and self-control, and also become more effective when they are tempted(7). In Narcotics Anonymous, lessons have been presented to recover the subjects, that in the lessons it is tried to Irrational Beliefs underlying addiction be reformed. Also, it is tried to reform the beliefs that suffer the addicts after resentment and leaving the drugs and makes it more difficult(26). It should be noted that management of rehabilitation of drug addicts is very important and rehabilitation managers should have complete information in all fields of rehabilitation, including rehabilitation of drug addicts. Prevention of recurrence of addiction is very important in the rehabilitation of drug addicts because continuing this process and returning to illness threatens one's health, their families, and also causes psychological and moral degeneration of individual(27). Self-avoidance is an important and influencing factor in relapse, regardless of these factors, despite the implementation of treatment programs, return to the disease will continue while physical capital and opportunity of health will be lost, or even families may be discouraged from supporting the patient. The aim of this study was comparing the important factors in addicts participating in three groups of anonymous addicts, methadone treatment, and therapeutic community in the city of Ahvaz in 2015 in order to optimize the rehabilitation of drug addicts and reduce chances of returning to the ruinous disease effectively.

MATERIALS AND METHODS

This study was cross-sectional type. The study population included male addicts referring to methadone treatment centers, therapeutic community, or Narcotics Anonymous meetings in the city of Ahvaz. After a pilot study, for 95% confidence, the number of samples for each group was determined and with 47 samples while samples were selected through available method. The data collection tool was a questionnaire consisted of two parts. The first part was related to demographic data of respondents. This information included age, marital status, educational level, employment status, duration of addiction, cessation, and treatment times. The second part of the questionnaire was self-avoiding drug. This questionnaire included 16 questions which were scored using a Likert scale of seven options (certainly No, most probably No, probably No, I cannot say, maybe yes, most probably yes, definitely yes). For scoring, all the questions had 1 to 7 scores (definitely yes 7 points, most probably yes 6 points, maybe yes 5 points, I cannot express 4 points, maybe not 3 points, likely No 2 points, definitely No 1 points) however for some questions (16-12-11-10-8-7-4-2) responses were rated in reverse. The overall score of this questionnaire was

between 16 and 112 and as the score of subject was higher it indicated higher self-efficacy. Validity and reliability of the questionnaire was tested in the study by Martin (1995) and Bramson (1999), that Cronbach's alpha coefficient in Martin study was 0.91(15) and in the study of Bramson was 0.87(2). Reliability and validity of a questionnaire was reviewed and approved by Habib and colleagues in 1390 on 150 patients in their study, Cronbach's alpha coefficient was calculated as 0.90(28). Cronbach's alpha was calculated in this study as 0.90.

After getting permission from the authorities, methadone treatment centers, therapeutic community, and Narcotics Anonymous, the questionnaires were given by the staff to patients through visiting the centers and explanations of necessary points to personnel. In terms of the anonymous addicts questionnaires were given by informing the public relations committee of Interface Narcotics Anonymous. The participants in the study were asked if they wish to participate in the study signed the consent form and also write address with contact number. When the questionnaires were completed and prepared, then they were received from the medical centers and interface Narcotics Anonymous. Data collection last for nearly lasted 6 months from April to September 2015.

Inclusion criteria consisted of male gender, age between 20 and 50 years, having more than 2 times a history of opioid withdrawal, and addiction more than six months. Exclusion criteria consisted of having psychotic mental disorders, incomplete questionnaire completion, simultaneous use of multiple treatments, intravenous drug usage, and drug possession during the period as well as having medical reasons "like having the chronic pain for justifying the drug consumption" (6, 29) respectively. Results were analyzed using one-way ANOVA and SPSS software.

RESULTS

The age group was between 20 and 50 years old participated in the study. The frequency of 20 to 30 year, 30 to 40 years, 40 to 50 years age groups in the methadone therapy, therapeutic community, and anonymous addicts were (11, 9 and 9) and (19, 29 and 26) and (17, 9 and 12) subjects respectively. Demographic characteristics and frequency of each one is given in Table 1.

Table 1. Distribution frequency of demographic data in the three groups

level of significance					Demographic variables
0.288	9(19.1%)	9(19.1%)	11(23.4)	20-30	Age
	26(55.3%)	29(61.7%)	13(40.4)	30-40	
	12(25.5%)	9(19.1%)	17(36.2)	40-50	
0.591	10(21.3%)	9(19.1%)	13(21%)	Single	Marital status
	37(78.7%)	38(80.9%)	34(71%)	Married	
	14(29.8%)	15(31.9%)	15(31.9)	High school	Education level
0.372	25(53.2%)	28(59.6%)	21(44.7)	Graduated	
	8 (17%)	4(8.5%)	11(23.4)	Higher than graduation	
	5(10.6%)	7(14.9%)	13(27.7)	Not employed	
0.080	2(89.4%)	40(85.1%)	34(72.3%)	Employed	Occupation status

significant level was 0.05.

Most people were in three married groups and most of them were employed in higher education diploma. The used drug in more participants was opium in this study and addiction period for most of them was more than two years.

Table 2. mean, standard deviation, minimum and maximum points and number of samples in three therapeutic community, Anonymous methadone addicts in the city of Ahvaz

number	Max	Min	$\bar{X} \pm SD$	Sample groups	Variable
47	50.00	50.00	89.27 \pm 21.63	Treatment oriented community	Self-efficacy of abstinence
47	50.00	50.00	83.97 \pm 18.78	Methadone treatment	
47	41.00	41.00	94.00 \pm 14.42	Anonymous addicts	

\bar{X} : mean SD = standard deviation

Average score of self-efficacy in prevention questionnaire in addicts participating drug in Narcotics Anonymous group was higher than other groups (Table 2)

Table 3. Results of unidirectional variance analysis

Sign	F	Square sum	df	Sum of squares		Variable
0.035	3.444	1181.29	2	2362.59	Between the groups	Self-efficacy of abstinence
		342.98	138	47332.38	Within the group	

According to the results of variance analysis (Table 3) there was a significant difference in the mean scores of abstinence self-efficacy questionnaire between three groups of participating including therapeutic community of drug addicts, methadone and there Narcotics Anonymous ($0.035 < p$).

Table 4. Comparison of the three groups

Dependent variable	Group (I)	Group (J)	Difference of Means (I-J)	Standard Error	Sig.
Self-efficacy of abstinence	N.A	M.M.T	10.021*	3.82	0.026
	N.A	T.C	4.723	3.82	0.434
	T.C	M.M.T	5.297	3.82	0.351
<p><i>p=0.05 was considered as statistical significance.*</i> <i>M.M.T: Methadone Maintenance Treatment N.A : Addicts Anonymous</i> <i>Therapeutic Community :T.C</i></p>					

In Table 4 the average of the three groups is presented that the only statistically significant difference between groups is observed in treatment with methadone and addicts anonymous. There was no significant difference in other variables.

DISCUSSION

As the results showed, the average scores of abstinence self-efficacy questionnaire among addicts participating in three methods of treatment including anonymous addicts (14.42 ± 94.00), community-based treatment (89.27 ± 21.63) and methadone treatment (83.97 ± 18.78) and the mean difference only between anonymous addicts and methadone treatment groups was significant.

Self-efficacy is individuals beliefs about the successful implementation of the behaviors required to get optimum results (13). Various researches have introduced self-efficacy as a contributing factor for the success of programs, quitting smoking, losing weight, and quitting alcohol and drugs(30).drugs. When People with low self-efficacy face with stress and frustration, instead of having dialogues and negotiation and assertiveness skills, have a tendency to take action and deal with the problems by drug abuse as a coping and adaption strategy. As the self-control skills and a sense of internal control is high in an individual, he is more able to resolutely refuse drug abuse(18).

Bandura introduced the individual experiences of previous success, seeing the success of others experiences, encouraged by verbal and physiological states as the main sources of self-efficacy and noted that it has a direct correlation with social skills with three sources of individual experiences of their success, successful experiences, and verbal encourage of others(30). According to the researches, lack of adequate social skills is one of the factors that can cause low self-efficacy and individual resistance against the powerless craving (18).

Participating in Narcotics Anonymous meetings increased opportunities for social contacts for patients and also provides high social supports for them. In fact, by participating in these meetings, in addition to increasing self-esteem, communication and social interaction of patients also increase while their introspection and isolation decrease, and leads to re-establish a constructive relationship and the useful experiences with other patients(31). In these groups, communications between people is high due to having a common point that is addiction old members provide the necessary supports for newcomers in order to abstain from drug use and frequent attendance at meetings is also strengthened. These social protections decrease social exclusion, social fragmentation and alienation and experiences and also strengthen interpersonal relationships elderly (32). Results found by Ghodrati and colleagues have shown higher continuation of cleaning among drug users who participated in Power and Associates meetings of Narcotics Anonymous(33).

Efficiency is strengthened often during the completion of a series of administrative functions, this also strengthen person's efforts for the harder skills. Most self-help programs give individuals the freedom of selecting their own methods for making changes(30). Efficiency and effectiveness of these programs are related to social protection and strengthen of their spirituality. They find an aim for their lives through the involvement with people and living with difficulty and depositing their problems to a superior force(32). In Narcotics Anonymous, members admit that without relying on a dominant force in control of their disease disabilities (23).

Philosophical principles of Narcotics Anonymous groups include frequent meetings with members improve and make changes in behavior, thinking and feeling of them. Voluntary and sincere cooperation and serve leads to strengthen the faith and resist on the pressures, expanding social and spiritual point of view, fostering a sense of altruism, a sense of belonging and social acceptance, sense of purpose, love for others and the physical and mental health (32). The sentence of "Just for Today" Narcotics Anonymous principles that rely on this principle, participants in the meetings say to themselves: "Just for today, I will focus my thoughts on my improvement, I will live today and without taking any drug I will have a good day." Repetitions of this sentence continuously by clients for days, months and years led to live without taking any drugs addiction and continuity(33) and in other words repetition of the same words can increase members abstinence self-efficacy.

The Narcotics Anonymous program base is twelve steps and traditions that are a set of guidelines outlining for a practical approach to recovery. The interesting point in this step is voluntary and optional addicted. What is very important is the continued presence and voluntarily. Therefore, what matters is effective and effects, the real addicted. Addict through attending in the meetings and asking for help from a guidance, who is an addict with a history of leaving addiction, could not resist the temptation of drug use (23). In three methods of methadone treatment, therapeutic community, and Narcotics Anonymous there was interpersonal communication, this was a relationship between the patient and doctor in methods of methadone treatment while this relationship was higher in therapeutic community approach. While the form of this relationship in addicts anonymous communication was the interaction between users. In this forum people with similar problems are brought together and social comparison is done between people with similar problems(32). Due to all and sharing the experiences with others without judgment and interaction among members, increases self-esteem and self-respecting of individuals. In this exchange of information, individuals learn coping and adaptation skills, such as, dealing with failed and destroyed relationships, management the pain and public problems, and how to meet their needs and requirements(25). The addicts by attendance at meetings, sees and hears other people's experiences of successes and by announcing his time of cleaning and also his positive and negative experiences about addiction disease, is encouraged by the words and feelings of others, that it can increase his self-efficacy (23). The high level of empathy and identification among the members of Narcotics Anonymous and feeling like being with others is a powerful tool to keep them clean. Drug addicted person honestly wants to end addiction and continue purity and encourage and support by other members, and also increase self-esteem and self-efficacy(26) and it could explain the results of this research. Additionally, since this study was conducted in Ahvaz, it is suggested that research with this content should be implemented in a big city in order to generalize the findings.

CONCLUSION

Self-efficiency in abstinence of drugs is an important factor to maintain the purity of the drug left addicts who attend in the meetings and is higher in addicts of Narcotics Anonymous compared with the therapeutic community and methadone treatment is higher and therefore, along with other treatments of disease, continued presence of patients in Narcotics Anonymous meetings is also suggested.

Acknowledgments

This article is a part the Master course thesis of Kourosh Navid registered in the School of Medicine, Ahvaz Jundishapur University of Medical (Project Number: PHT-9403). The authors thank the research deputy of Ahvaz Jundishapur University of Medical Sciences for financial support of this study.

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