

Effectiveness of Community Reinforcement and Family Training (CRAFT) on Motivational Stages of change of Drug Abusers to Engage in Treatment

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Abstract

Although motivation is important in treating the drug abuse, main people in patient's life who are concerned with the patient is important and provides a hopeful view for participating the reluctant patients in the treatment. To this end, Community Reinforcement and Family Training (CRAFT) applied. This study aimed to evaluate the effectiveness of Community Reinforcement and Family Training (CRAFT) on the family members of substance abusers to change the motivational stages of the reluctant patients. This was a quasi-experimental study with control group in which the pre-test and post-test were used. In the present study, two experimental groups (CRAFT and Nar-Anon) and a control group (as usual) were used using the purposive sampling of the families with reluctant drug abusers who referred to a methadone treatment clinic in Tehran were selected. Each of the groups consisted of 25 people. CRAFT groups were trained in 12 sessions of intervention techniques (CRAFT). Nar-Anon groups participated in self-help sessions and control group did not receive any intervention. All three groups completed demographic questionnaire and the motivational stage of change questionnaire about the main patient and the results were quantitatively analyzed using SPSS-22. There was no significant relationship between the CRAFT group and Nar-Anon group with the control group and the change of their motivation in pretest and posttest. CRAFT was effective in changing the reluctant drug abusers to engage in the treatment from the motivational stage of the "pre- contemplation" and "contemplation" stages to the "preparation" stage and changing the "preparation" stage into the "action" stage. However, there was no significant change in this regard in the other two groups. Participating in the treatment CRAFT was effective in changing the patients' motivation to change.

Keywords: Community Reinforcement and Family Training (CRAFT), Motivational Stages of change, Nar-Anon, Drug Abuse.

1. Introduction

Drug abuse is a chronic recurrent mental illness with severe motivational disorders and loss of control of behaviors (Dallas et al., 2010). In other words, drug abuse is one of the most pervasive social, cultural and health crisis and has destructive effects on social, political, cultural, economic, and psychological and health issues. Some infectious physical diseases such as hepatitis and AIDS, mental illnesses such as anxiety and depression, social problems such as an increase in drug-related crimes such as robbery, murder, self-immolation, unemployment, domestic violence, child abuse, domestic violence, divorce rate and decreasing academic performance of children with addicted parents (West & Brown, 2006). Drug abuse disorders are generally divided into two categories: drug abuse and dependence (Coombs, 2004). Drug abuse is the excessive use of drugs during the time that affects the life (Ghods et al., 2011) and leads to the clinical consequences or distresses (Coombs, 2004). An important characteristic of substance use disorders is an underlying change in brain circuits that may persist beyond detoxification, particularly in individuals with severe disorders (Diagnostic and Statistical Manual of Mental Disorders, 2013). Reber believes that drug abuse is an incompatible pattern of the drug use and this leads to the emotional, cognitive, and behavioral injuries in workplaces, schools and other social environments and is characterized by drug tolerance and treatment (Reber, 1995).

Drug abuse and dependence is one of the most common and most expensive health issues in new world and has serious consequences for the people in different ages (Scruggs et al., 2005). Few societies are free from alcohol and drug and are not concerned with solving this problem. A drug abuser is always a member of a family that interacts with other family members. In this case, he cannot be considered as an isolated person (Levinson et al., 1997). In addition, the drug abuse can negatively affect the whole family and other persons including the friends.

The most common and most harmful misunderstanding on drug dependence is that drug dependence only affects the drug abuser. If drug abuser is treated, everything will be good. These views not only impose different pressures on drug-dependent individuals, but also ignore the fact that other family members suffer from (Barnard, 2007). The consequences of the drug abuse on other members of the family are substantial and deteriorate by passing the time (Barnard, 2007). Some problems that drug abuser encounter with include violence, losing the property, anxiety, and low family attachment (Manuel et al., 2012). Other issues that are stated by the important people in life of the patients include depression, physical complaints, and low self-confidence. They also report the marital conflicts (Scruggs et al., 2005). They suffer from prolonged stress, depression, anxiety, chronic fatigue, concern and frustration (Barnard, 2007) and they wish their patient were treated (Landau & Garrett, 2003). Most of these patients have low motivation for the treatment. Motivation plays a significant role in treatment of any illness especially for the patients with addiction problems. Motivation is a factor which influences patients to look for treatment possibilities, follow instructions of the treatment and particularly make prosperous long term changes (DiClemente et al., 1997). Motivation is a first meaningful step towards changes in behaviour and plays one of the central roles in addiction treatment; moreover it is considered as an important part in the outcome of the treatment (Cahill et al., 2003).

People with different levels of preparation and motivation change themselves, and undergo five stages include pre-contemplation, contemplation, preparation, action, and maintenance. This process is not linear, but it is orbital and rotational so that at every stage, patients can leave the treatment (Arkowitz et al, 2015). Although the motivation is important in the treatment of the addiction, 80% of the drug abusers are in the pre-contemplation and contemplation and are not ready to change (Tonigan et al., 1999). One of the solutions for increasing the patients' motivation to engage in the treatment is that the patients can balance the advantages and disadvantages of the addiction treatment and then decide to participate or not participate in the treatment (Stevens et al., 2015). On the other hand, if the addicts participate in the treatment, it cannot be hoped that the drug will not be resumed. Statistics show that 80% of people will resume addiction less than six months (Witkiewitz & Marlatt, 2004). A two-year follow-up showed that between 25 to 50 % of the participants who participate in the treatment resume the addiction (Dennis et al., 2003). Therefore, addiction is a chronic problem and reversible (Brink & Haasen, 2006).

By the early 1980s, there was no scientific pattern for helping the drug abusers. Helping the families with drug abusers was traditionally confined to the Narcotics Anonymous and Johnson intervention agency (Myers et al, 2001). CRAFT has been recently invented and it uses the new techniques to help the families with drug abusers to encourage their patients to engage in the treatment in spite of the idea that says patients themselves should decide to treat their addiction (Smith & Meyers, 2004). CRAFT is based on the behavioral principles and cognitive-behavioral techniques that Community Reinforcement Approach that has been scientifically supported with items for the users that have accepted to treat themselves. First version of the CRAFT was invented by Meyers and was tested by Sisson and Azrin in 1980. This approach is based on the belief that the family members to persuade a loved one that is resistant to treatment can play a powerful role. The effectiveness of this treatment has been investigated in different studies with desirable results. Meyers et al. (1998) used the CRAFT for treating the unmotivated drug abusers and showed that CRAFT is useful for the coping strategies or withdrawal for helping those we like them. Kirby et al. (1999) used the CRAFT for the families and alcohol abusers, concluded that treatment improves the social performance and temper of the subjects, and led to consideration of their problems. CRAFT has been used in many other countries for the alcohol and drug abusers, family members, and friends of the drug abusers with pleasant results. Craft approach teaches Concerned Significant Others (CSO) to increase motivation and participation of drug-dependent individuals for treatment (Roozen, Blaauw et al. 2009). Studies evaluating the efficacy of the CRAFT approach have demonstrated success in engaging IPs into treatment, improving CSO functioning, and decreasing IP substance use. Overall, CSOs engage 55%–86% of treatment-refusing substance users using the CRAFT approach (Manuel, Astin et al. 2011).

Studies that compared the effectiveness of other treatments such as Nar-Anon and Al-Anon and so on reported similar results. However, craft is a new approach and further studies are needed in this area in the various groups. Unfortunately, the efficacy CRAFT has not been compared with other conventional methods in Iran. Moreover, in spite of the social conditions of Iran and warnings on increasing the number of addicts as the most serious problem of general and social health in Iran and the lack of the interventions affecting the treatment refused drug abusers, this method can be useful as a part of the treatment process. Understanding the effects of different methods including the CRAFT on the motivational

stages of change in treatment refusing drug abusers may help us to provide the new training and treatment methods in this regard. Therefore, this study mainly investigates the effectiveness of the CRAFT compared to the Nar-Anon and as usual methods in increasing the motivation of the drug abusers. This study also aims to answer the following questions: How CRAFT is efficient in encouraging the reluctant drug abusers with low motivation to engage in the treatment? To what extent, the trained CSO can help their patients to enter the preparation stage for the treatment or self-help groups?

2. Method

This was a quasi-experimental study with the control group in which the pre-test and post-test were used. Two groups of Nar-Anon and Craft and a control group were used. The statistical population includes the family members of drug abusers. The statistical sample includes all families with treatment refused drug abusers who referred to the Methadone Clinic in Tehran through contact with the National Addiction Helpline. Also in this study, Purposive sampling method was applied. According to Cohen table, and according to the test power of 80% and taking into account the loss of some participants, the number of samples for each group was 25 people and the total number was 75.

Inclusion criteria for participants were as follow: Being Female, Having a family member who have criteria for drug abuse disorders for substances such as narcotics, stimulants (amphetamine, methamphetamine, cocaine), cannabis (Marijuana and Hashish) and alcohol, residency in Tehran or suburbs, the Identified Patient (IP) refused treatment, participant has an effective role in the life of the IP, contact with the Identified patient at least 3 days a week, the age of at least 18 years old for both participating person and the Identified patient.

Exclusion criteria included as follow: abusing drugs by participating person herself, having the criteria for schizophrenia or any other psychotic disorder diagnosis, educational level of less than a fifth-grade in primary school, receiving substance abuse treatment in the past 3 months by IP (apart from detoxification), Unavailability of the drug-dependent patients for various reasons (including the arresting by police).

CRAFT is a 12 sessions training program for families to encourage the patients for the treatment and improve their quality of life. This is based on the principles of behavioral and cognitive-behavioral techniques that have been invented by Robert Myers.

Nar-Anon: A self-help group consisting of families of drug-abuse patients with the purpose of supporting the group members. In this study, Nar-Anon group formed by other people before the beginning the study in Methadone clinic without the presence of the professionals and based on common method in these groups, 10-30 subjects with one session per week and group members exchange their information.

2-1 The hypothesis:

CRAFT method is more effective in encouraging unmotivated drug abusers to engage in the treatment and develop from pre-contemplation stage to the "preparation" stage compared to the control group.

2-2 Research instrument:

Motivational Stage of Change Checklist for drug abuser: this is a researcher-made checklist based on the motivational stages of change theory by Prochaska & Deklemente inspired by the Eurika questionnaire. It asks the compassionate participator to answer this question based

on the patient's idea: "what do you want to do for your problem of addiction?" the answer of participant's determined the Motivational stage of the IP. There were three scores: 1 for the pre contemplation stage, 2 for the contemplation and 3 for the preparation stage. A demographic interview questionnaire. This questionnaire is based on the original design of the CRAFT and it considers the basic information (such as age, education, marital status, relation with the patient, etc.).

3. Findings

The results of the interventions in the two groups CRAFT and Nar-anon and in a control group were presented in Table1. Table 1 shows the sample distribution in three groups according to the motivational stages. Kruskal-Wallis test was used to answer the hypotheses 1 and 2 and the results were reported in Tables 2 and 3.

Table 1: Results of the Kruskal-Wallis test for comparing the patient's motivation to change in the pretest

| | |
|------------|-------|
| Chi-square | 1.92 |
| df | 2 |
| sig | 0.383 |

Results of the Kruskal-Wallis test for comparing the patient's motivation to change in the pretest showed no significant difference between the three groups CRAFT , Nar-Anon and control in levels of motivation to change for drug treatment ($P=0.383$, $df=2$, $X^2=1.92$).

Table 2: Results of the Kruskal-Wallis test for comparing the patient's motivation to change in the posttest

| | |
|------------|-------|
| Chi-square | 6.45 |
| df | 2 |
| sig | 0.040 |

Results of the Kruskal-Wallis test for comparing the patient's motivation to change in the posttest showed a significant difference between the three groups CRAFT , Nar-Anon and control in motivational stage of change for drug abuse treatment ($P<0.0.5$, $df=2$, $X^2=6.45$). The results confirmed the hypothesis that Only CRAFT intervention helped the treatment refused drug-dependent patients to pass motivational stage of the pre- contemplation" and "contemplation" and enter the "preparation" compared to the control group "was confirmed.

4. Discussion

Increasing the number of the drug abusers is one of the most important problem in the world that is shown as a destructive social phenomenon. One of the important ways to treat addiction and motivate addicts is to engage their families in the treatment sessions. This study aimed to investigate the effectiveness of CRAFT on the motivational stages of the treatment refused drug abusers to engage in the treatment in Tehran. CRAFT has been designed to engage the treatment refused drug abusers in the treatment.

The results of this study confirmed the hypothesis that states interventional CRAFT helps the treatment refused drug-dependent patients to pass motivational stage of the pre- contemplation" and "contemplation" and enter the "preparation" compared to the control

group "was confirmed. Therefore, it can be said that participating in CRAFT program affects the patient's motivation to treat themselves.

The results of this study are consistent with those of the Sison & Azrin (1986), Miller et al. (1999), Rosen et al. (2010), and Manuel et al. (2012). These studies showed that CRAFT is effective on motivating the drug abusers. Sison & Azrin (1986) conducted the first random study that investigated the validity of the methods based on the social basis on the main people of the alcohol abusers. They randomly selected 12 CSO (important people in life) for primary CRAFT and a disease model approach -Al-Anon approach (Anonymous Alcoholics Family) and divided them into two groups. In CRAFT, six treatment refused alcoholic abusers entered the treatment process in CRAFT after a mean of 58.2 and 7.2 sessions.

Miller et al. (1999) randomly divided 130 main people of life into three different engaging approaches by funding of the National Institute for alcohol abuse and alcoholism: Treating the Al-Anon facilities to encourage Alcoholics resistant to the specialized treatment or engaging them in 12 stage process, A Johnson Institute intervention that prepared the main people of life for entering the intervention session that led to the official treatment, CRAFT that trained the skills for changing the behaviors and new strategies for directing the alcoholic abuser.

All three therapies used manuals, and consisted of 12 hours planned contacts. Assessment interview was conducted by the people who were unaware of the way subjects are divided. Results showed that CRAFT was effective in engaging the alcohol abusers in the treatment (64%) compared to the common intervention including the Al-Anon (13%) and Johnson Institute intervention (30%).

Rozn et al. (2010) compared 264 main people of life in three groups of the CRAFT, 12-sessions treatment (Al-Anon and Nar-Anon) and Johnson Institute intervention in terms of motivating the patients to engage in the treatment and improving the performance of the main people of life. The results showed that the CRAFT is more effective than the Al-Anon and Nar-Anon and Johnson Institute intervention in engaging the patients in the treatment. All three groups showed the physical and psychological developments during the 6 month of the treatment. Manuel et al. (2012) treated 40 main people of life of the abusers and their relatives using the CRAFT based on the individual and group methods. They concluded that CRAFT is effective in engaging the abusers in the treatment.

CRAFT has been efficient in a series of studies in other countries for the alcohol and drug abusers and family members (spouse, parents, children, adult children), or friends who have received the CRAFT training, could encourage the abusers to take part in the treatment as 0.64 to 0.86. This is significantly higher than the rate at which the traditional choices including Johnson Institute Intervention and Al-Anon can be observed. In addition, main people of life are satisfied after the training and have mental and physical health compared to the pre-treatment, irrespective of the participation of the abusers (Manuel et al., 2012; Smith and Myers, 2004). However, no training on this regard has been implanted in Iran for the professionals and families that can encourage the abusers to engage the treatment process using a standardized method. Therefore, further studies are needed to obtain the satisfactory results. The results of this study should be cautiously generalized and a general result should be agreed.

CRAFT and Nar-Anon and comparing these two methods with previous studies are the strong point of this study. In this study, the time factor control and environmental interactions were of the confounding factors that should be considered in future studies. Finally, a valid tool to assess the patient's motivational stages based on the family and implementation of individual treatment methods is proposed.

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