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Assessment Role of Participation in Narcotic Anonymous in Opiate Dependents during Abstinence

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Abstract

***Background*:** The activity level of Narcotics Anonymous group (NA) is expanding in many countries, including Iran. Some research has confessed the benefits of 12-step NA approach compared with similar methods. In the present study, the role of regular participation of opioid addicts in the NA group was studied in terms of abstinence rate and compared with routine program of detoxification centers of the person Welfare Organization and Medical Sciences University.

***Materials and Methods*:** All addicts who attempted to quit in self-introducer clinical centers of Medical Sciences University and the Welfare Organization of Rafsanjan were suggested to participate and not to participate in NA, based on even and odd numbers, respectively. Among them, two equal 120-person (NA and control) groups were selected, then evaluated every three months and followed up for 12 months. Their status was assessed through questionnaires, interviews, and morphine tests.

***Results*:** The purity rate of NA group with 8.49 months was significantly different with normal addicts in 5.19 months (p=0.001). The recurrence rate at 12 months was significantly lower in the NA group compared with the control group, calculated through independent t-test (p=0.001). Quitting history and addiction duration in the NA group was significantly higher than control group.

***Conclusion*:** The findings of the research support a better prognosis for participants of NA group. Further researches are recommended to provide useful clinical information for patients and professionals.

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Introduction

The Narcotics Anonymous (NA) group is an effort by addicts themselves to save addicts, separate from the state systems. This group consists of 12 traditions and claims and they run their members on the basis of these 12 traditions. Patients are assisted to achieve the following 12 skills during NA meetings: the acceptance of addiction as a disease, being guilty about addiction, inability against drugs, the feasibility of purity, strengthening the will, confessing to guilt, moral commitment, belief in God's support, belief in compensation, helping other addicts, drug abstinence, self-esteem growth, and stress adjustment skills [1]. Researchers showed that opiate-addicted women with borderline personalities benefited from participating in both types of Dialectical Behavior Therapy (DBT) and 12-step Comprehensive Validation Therapy (CVT), but the positive test rate in DBT group in a 16-month follow-up was lower than CVT group; 27% vs. 33% [2].

Another study showed that patients who participated in the NA group and passed the 12 steps of NA had higher abstinence rates compared with the methadone maintenance treatment. The results of this study about the impact of these 12 steps of NA group showed that 68% of participants in the NA 12 steps had higher rates of abstinence, self-caring, and educational progress, and lower referral to health centers after a one-year period [3]. In a one-year follow-up research of injecting drug users who participated in the NA group and passed the 12 steps, a higher level of abstinence and self-care was reported [4]. Another study about the usefulness and effectiveness of taking part in the NA and AA (Alcoholic Anonymous) groups showed that people who regularly attended NA meetings, reported higher levels of purity and self-efficacy, compared with the control group [5]. A review study on a group of researchers showed that people of different ages and genders who attended 12-step meetings of the NA and the AA have benefited from it and reported more purity [6]. Another study on alcoholic HIV patients, reported considerable purity following participation in AA meetings, compared with control group [7].

To answer the question whom the NA group is helpful or more helpful for, Boschert has stated that all persons attending in the NA group profit, but those with features like more religious support, more impetus for change, stronger religious ground, belief in sickness model of addiction, previous experience with the 12 steps of NA,

greater involvement with group, and African Americans benefit more [8].

There is a negative attitude towards the participation of women and the insecurity of the younger ones to take part in the NA and the AA. But a research on 127 women and young addicts attending at NA meetings revealed that in a one-year follow-up, the level of leaving the group and the report about negative experience in the group were not high in women and youth compared with men and older, and that leaving the group was not due to negative experiences in the group; thus, it suggested that young people also, like adults, be encouraged to attend in AA and NA groups [9]. Another study reported that young people were less likely to participate in the NA and the AA than older people, especially those who had low doses or short addiction histories were less likely to attend the NA [10].

But all researches have not expressed negative opinions about the participation of youth in the NA and the AA. In this field, a research has reported the usefulness of attending in 12-step meetings in the treatment of alcohol- and heroin-dependent adolescents and youth compared with naltrexone maintenance therapy and family therapy [11]. Another review study on 19 researches about the participation of young addicts in NA and AA groups concluded that adolescents were less involved in the 12 steps, but they benefited from taking part in NA meetings [12]. Other review studies concluded that the researches do not afford a definite opinion about the usefulness of NA meetings, and that this work requires further researches [13].

Another study concluded that addicts who used several opiate substances have participated in 12-step meetings more, and have taken higher advantage than single-substance dependents [14]. Finally, why do the youth stay in the NA group or leave it? A research studied two groups of 74 and 377 adolescents who took part in NA and AA, and investigated the causes of their stay or leave; universality, support, and creation of hope were some staying reasons and fatigue, boredom, and mismatch with the group were the reasons for leaving the group [15].

Another study performed in a 5-year follow-up showed that all consumers of narcotics, alcohol, and stimulants took advantage from attending in 12-step meetings, but consumers of narcotics and alcohol benefited more than stimulants consumers; this concluded that participation in the AA and the NA is a good help and supplement for maintenance treatment, especially for those who have a poor therapeutic prognosis and those who frequently experienced failure with other treatments [16].

During literature review, the researcher found very few articles about the NA group in Iran, which indicates the short life of the group in the country. However, a research in Isfahan showed that the addicts participating in the NA group had a higher success rate compared with the control group [17].

Although, the personnel of health centers were not well-informed about the work and the nature of the AA and the NA group and its 12 steps, and were not familiar with the NA group, but they had a positive attitude towards it [18].

Research on the NA group is always difficult and involves some problems. In this context, a review study showed that young people profited more from participating in the NA 12-step process compared with other conventional methods. They also suggested that the results of the studies had four constraints: the studies in this area were limited, there were no outpatient studies, most of the evidence was limited to observations only, and finally, the conditions of the NA 12 steps were inadequately measured [19]. The above mentioned limitations, as well as the ambiguous results of researches, and the limited cooperation of NA groups with official institutions are requirements for present studies which undermine the results of the researches and their methodology.

In the present study, it was attempted to investigate the role of regular participation in the NA 12 steps in the abstinence level of opioid dependents in comparison with passing the quitting programs of self introducer clinical centers, including naltrexone maintenance therapy, symptomatic treatment by a psychiatrist, or counseling by a psychologist in a one-year follow-up.

Materials and Methods

This analytical descriptive study was performed after approval by the Research Council and Ethics Committee of Rafsanjan Medical Sciences University, and having obtained the consent of the participants. The study population consisted of all persons who voluntarily attempted to quit in self- introducer clinical centers of Medical Sciences University and the Welfare Organization of Rafsanjan during the first 6 months of 2008. Sampling was conducted in two stages. In the first stage, after the detoxification period, through a systematic, randomized method and an alternate form (even and odd), the patients were alternately suggested to take part in the NA group and to continue the therapy at the clinic in order to treat cravings and other symptoms and problems by help of the psychiatrist and the psychologist of the center.

The rate of acceptance of the clinic by patients to continue its program was almost double of the rate of acceptance of the NA group; therefore, the second stage of sample selection was performed through the group balance based on variables [age (20-40), gender (male only), no serious psychiatric or physical disorder, similar means of type and amount of consumption, voluntary quitting, similar average of marriage and celibacy, and similar economic class]. Sample size with α=0.05 were considered as 78 people for each group and to ensure 120 per group. (The loss rate was approximately 20 persons per group; thus, the remaining population was 100 persons in each group). The NA group did not get special drug therapy to quit or to stay clean during 12 months. The program of the normal group remaining in the clinic included monthly free attendances at the clinic and receiving behavior therapy by a psychiatrist for occurred problems, receiving naltrexone for creating repulsion, and counseling by a psychologist. Candidates who participated in at least 2 sessions per week

and followed 12 steps of this group along with experienced members of the group were preserved in the sample. The criteria to remain in the normal group included monthly referral to the clinic and continuing the cooperation in treatment. The exclusion criteria from the group were positive morphine tests, and three consecutive absences. The follow-up continued for 12 months.

In order to confirm abstinence from substances, both groups were followed up every three months based on their addresses in the research, and their abstinence level was studied. The survey tools used to collect data were: 1- Researcher-made questionnaires of demographic characteristics including substance use features, type, amount, duration of abuse, physical and psychological problems, age, gender, occupation, socioeconomic status, and marital status 2- Morphine tests 3- Interview by a psychiatrist or a psychologist. To obtain more information from the NA group, the researcher visited their meeting place weekly and interviewed or had questionnaires completed, or performed morphine tests at the beginning or end of the meetings with the help of senior NA members. Collecting the information of the control group was done in clinics. After collection, the data were compared with SPSS-12 software, χ^2 test, the Fisher test, the independent t-test, and variance analysis. The main limitation of this study was reluctant cooperation of NA members in morphine testing. They claimed that based on the rules of the group, they should not relate to governmental organizations or not use medicine.

Results

The mean age of the NA group and the normal group were 34.69 and 35.66 years, respectively. According to the variance analysis test, there was no significant difference between the two groups in terms of age (p=0.42). There was also no significant difference between the NA and the control groups in terms of the type of used materials, regarding to χ^2 test (p=0.129). Furthermore, no significant difference not observed between the used materials and abstinence level in both groups (p=0.58). Meanwhile, mean abstinence levels from drugs were 7.3 months for opium, 7.05 months for opium syrup, and 6 months for heroine. Also, there was no significant difference between occupation and abstinence levels (p=0.26).

By looking at the above diagram, it is seen that the abstinence from drugs in the NA group was higher than the control group, for the number of pure people in the control group was lower than the NA group, from beginning to end. The control group had 68 clear patients at the end of the first month, while in the NA group 99 persons were in the abstinence state. At the end of the twelfth month, the number of pure people was 33 in the NA group and 19 in the control group. This difference was significant with the independent t-test and p=0.001. By looking at the above table, we notice that the mean addiction duration in the NA group was significantly higher than normal addicts (p=0.022).

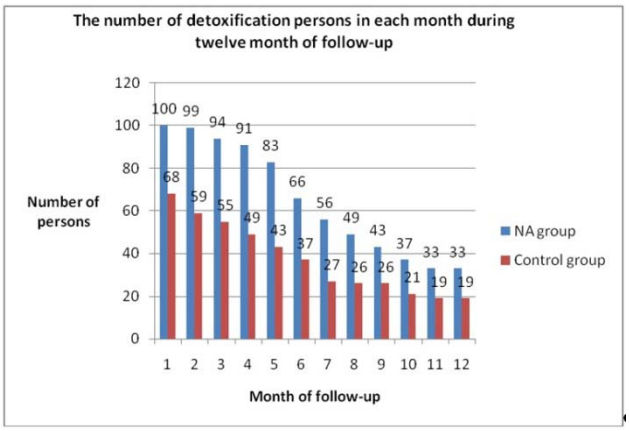

Figure 1. The pure individuals' number in each month during twelve-month follow [NA group (yellow) and control group (white)]

Discussion

In this study, the abstinence level of the two detoxified groups from opiates including opium, opium syrup, and heroin, in two different conditions (with and without participating in meetings of the NA group) were compared for one year. With a glance at the diagram, the purity level of NA group was much more than the normal group in the first month. Also, the purity level of the NA group was significantly higher than the normal group during the 12 months. This probably reflects voluntary and purposeful entrance and commitment of individuals on arrival at the NA group. In other words, people entered in the NA group with the intention of abstinence. But in the normal group, the quitting decision could be not very sure. However, the validity of these claims needs to be more deliberate. By looking at the above table, it can be inferred that participation in the Narcotics Anonymous group had increased staying clean rate, and the abstinence rate was high in comparison with usual care in psychiatry and self- introducer clinical centers.

The monthly average purity of the NA group was significantly higher than the normal group. The above results are consistent with the findings of the research that showed the usefulness of participation in NA and AA groups in the treatment of alcohol- and heroin-dependent individuals [3-7]. The demographic characteristic of the individuals who took part in N the A group or were serious about participation in the treatment program of the NA was different from the general population of addicts. The results of the above table show this.

Table 1. A comparison of the duration of abstinence (purity) from the drug, quitting time, and the duration of drug use in the NA group and the normal addicts

	Duration of Abuse (Yr)			The mean number of previous detoxification			The mean duration abstinence (Month)		
	Mean±SD	OR	p-Value	Mean±SD	OR	p-Value	Mean±SD	OR	p-Value
NA group	12.96±5.72	0.34	0.022	2.9±6.88	2.34	0.001	3.02±8.49	2.24	0.001
Control group	10.65±8.19			3.08±3.7			4.38±5.19		

According to the data displayed in this table, the previous quitting rate of the NA group addicts is almost double of the normal group; therefore, it can be interpreted that they had already made more attempts to quit, and possibly had heavier and higher levels of addiction. This issue is consistent with the results of other researches that indicate people with higher consumption level have more tendencies to 12-step meetings [10-14].

Thus, the participation of such people in the 12-step meetings indicates the higher effort, tendency, and impetus required to quit, which is consistent with the results of this research: every individual benefited from participating in NA, but those who had the following features benefited more: higher religious support, more impetus for change, stronger religious ground, and belief in the sickness model of addiction [8]

According to the data displayed in the table, the consumption and the addiction duration of the NA group was significantly higher than the control group. This is contrary with the results of other formal therapies of drug abuse, but is consistent with the results of researches about NA, because individuals with prolonged histories of consumption and older age are more willing to participate in the NA group [10-13]. To interpret the results of table 1, it can be said that perhaps addicts with prolonged histories of consumption are more tired of taking the drug, its side effects, and its costs, thus they select non-formal therapies, and in fact, consider the NA group as a last remedy. Another reason is that people with prolonged consumptions and more likely to quit, and have probably tried other methods, so they are willing to try the NA.

Most of the participants in these groups were farmers and self-employed, and the largest used substances in both groups were opium, opium syrup, and heroin; this finding is consistent with overall and regional statistics.[20]

However, the results of taking part in NA meetings were more satisfying than the normal way of quitting centers to preserve purity of the patients. This result is consistent with the results of other researches [3-15]. Therefore, it is suggested that the personnel and experts of drug abuse treatment centers, besides creating more positive opinions about NA and increasing awareness about the nature of the 12 steps, use the NA group as a supplementary program to keep the patient clean.

In the end, mentioning some restrictions is required and essential: the first is the limited number of studies in this field, for example, little research has been done in this area in Iran, most of the evidence was limited to observation only, and finally, the conditions of the NA 12 steps were inadequately measured, because these 12 steps were explained to novice individuals of the group by senior members whose knowledge, training principles, and literacy and experience levels were not controlled. Also, the psychologist or psychiatrist, or the administrator interested in training and intervention were not allowed to constantly participate or involve in the education. The main problem in the present study and possibly similar researches is the lack of cooperation by the NA group with project administrator(s) (which seems to be due to one of 12 traditions of NA to not cooperate with formal institutions, as members claimed). The mentioned points slightly confuse the results. Therefore, it is suggested that better experimental measures be provided in future researches in order to obtain more accurate results in terms of data collection, like the assessment of the 12 steps' impact, the abstinence test and the indirect control of group activities.

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Authors' Contributions

All authors had equal role in design, work, statistical analysis and manuscript writing.

Conflict of Interest

The authors declare no conflict of interest.

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