Comparison of Residential and Therapeutic Community Centers in Preventing Substance Abuse Recurrence and Reducing Self-destructive Behaviors of Substance Users

Malahat Amani[®], Homa Saemian², Hussein Rezvan-Doust³

Original Article

Abstract

Background: Substance abusers show extensive self-destructive behavior due to the nature of the disorder and chronic and recurrence conditions. Various plans are presented for treating substance abuse. The purpose of this study is to compare the residential and therapeutic community (TC) centers in preventing substance abuse recurrence and reducing self-destructive behaviors of substance abusers.

Methods: The statistical population was all the substance abusers who referred to TC and residential centers that were under the supervision of Welfare Organization of North Khorasan Province, Iran. Five centers were selected by cluster random sampling method. The data colleting tools were self-reporting questionnaires of Resuscitation Predictor Scoring Scale (RPS Scale) and Self-Harm Inventory (SHI) filled out by patients who were staying in treatment for minimum of two weeks.

Findings: There was no significant difference between two treatment methods in terms of reducing tendency to use substance. Also in terms of reducing self-destructive behavior, TC was more effective than residential treatment.

Conclusion: Considering the positive consequences of TC, motivational programs need to be established in order to increase the longevity of substance abusers in treatment.

Keywords: Therapeutic community; Residential treatment; Substance abuse; Recurrence; Self-destructive behavior

Citation: Amani M, Saemian H, Rezvan-Doust H. Comparison of Residential and Therapeutic Community Centers in Preventing Substance Abuse Recurrence and Reducing Self-destructive Behaviors of Substance Users. Addict Health 2019; 11(1): 43-50.

Received: 30.08.2018 **Accepted:** 03.11.2018

Correspondence to: Malahat Amani, Email: m.amani@ub.ac.ir

¹⁻ Department of Psychology, School of Humanities, University of Bojnord, Bojnord, Iran

²⁻ Counseling Center, Kosar University of Bojnord, Bojnord, Iran

³⁻ Welfare Organization, North Khorasan, Bojnord, Iran

Introduction

Addiction is a chronic disorder that is accompanied with substance abuse and the addict loses the control of his normal or social behavior and repeating substance usage pattern leads to negative effects.1 Substance addiction particularly complex due to the biological, psychological, and social nature of humans; thus, treating this disorder is often difficult and ineffective with an emphasis on only one approach. Substance abuse causes a lot of pain and discomfort due to physical, psychological, occupational, and social problems. substance abusers after their recovery and detoxification start using substance again, not because of the physical temptation of the substance, but due to underlying causes of addiction that have not been resolved, and substance abusers are not able to deal with high-risk situations.2 Most substance abusers recur to take substances after a period of detoxification and entering rehabilitation treatment 90 days after starting treatment.3

Substance abusers are likely to perform self-destructive behaviors due to damages and tensions. Self-destructive behavior is a deliberate, fatal, or non-fatal action that a person performs despite being aware of its danger and the harmful consequences directly going back to him and indirectly affecting the family, friends, and the whole society.⁴ Samples of self-destructive behaviors are substance abuse, alcoholism, and going on a crash diet.⁵

Welfare Organization presents non-medical therapies in therapeutic community (TC) and residential centers for substance abusers. Residential treatment is lacking in precise and consistent definition. Generally, there is no standard practice in this area; residential treatment is often used as an umbrella term.6 Residential treatment is simply providing the essential needs for accommodation, including food and shelter, along with providing health care.7 Residential treatment centers are places for improving and rehabilitating people with substance use disorder (SUD), and the clients volunteer to stay at these centers. The main approach at this center is abstinence-based, with the cooperation of peer support. Residential treatment centers are available 24 hours a day. Also, in these residential treatment centers, the help of social workers and related training are presented at the limited level considering the role and place of peer support during the recovery rehabilitation period and patient's circumstances. The programs are based on selfhelp and 12-step recovery. Residential centers are providing a systematic, non-hazardous, and nontempted environment in which substance abusers interact with other recovered people and self-help communicate with the groups. Launching 12-step programs, changing their attitudes toward ethical and behavioral issues, learning to live without substance as well as learning coping skills can be used to reduce the likelihood of a return to substance use.8

TC method is a structured, non-medial, and regulatory treatment pattern that uses social, psychological, and self-help approaches to treat substance abuse in addressing behavioral, emotional, attitudinal, and family issues. TC method believes that substance abuse has social defects and involves social therapy. This treatment may be an organized attempt to re-socialize the references that the community is known as a factor in personal change. TC has the same viewpoints of clients, and emphasizes the structure and hierarchy of programs, the need to individuals from the unhealthy separate environment, and the need for a long and intensive treatment phase. This therapeutic approach has clear norms about personal and behavioral accountability which forms the core of the learning of the acceptance and internalization of these norms.9 TC constructs an environmental therapy that includes individual and group counseling, training sessions, clinical strategies, incentives and punishments, and other behavioral that will give treatments residents opportunity to discuss motivational issues during treatment, reconstruct social skills and the ability to resist substance, learn new forms of behavior, recognize and overcome their specific feelings, and improve their problem-solving skills, and according to the evaluation feedback from themselves and others, they undergo the treatment process with the supervision of specialists and helpers (counterparts) to reach the clearance stage.2

Few studies have been carried out about the effectiveness of TC method on substance abuse

treatment in Iran. The results of Sadrosadat et al.¹⁰ showed that community centers taught the addicts how to live a quiet social life and make the optimal performances in their social relationships after treatment. Yarmohammadi Vasel¹¹ in a study showed that TC was effective in life skills improvement including problem solving skills, communication skills, self-awareness, excitement management, and self-care tools for people with substance abuse. Shahmohammadi and Kheyrabadi¹² found that TC had an increasing effect on the general level of hope of the TC center referrals in Isfahan, Iran, and this effect remained at the follow-up stage.

Overseas studies also presented the effectiveness of TC on SUD. Edelen et al.¹³ showed that TC improved self-esteem attitude, self-esteem and avoidance, as well as the ability of life skills and problem-solving skills, and also reduced the recurrence of substance abuse. Szalay realized that TC led to changes in the dominant trends in perceptions, attitudes, and cognitive patterns of substance abuse.¹⁴ Some researchers conducted TC in prisons and found that it had a positive effect on criminal activity compared with conventional therapies.¹⁵⁻¹⁸

Condelli and Hubbard¹⁹ evaluated relationship between the characteristics of clients, the type of treatment (TC treatment versus other long-term residential treatment), post-treatment outcomes, and found that clients who were more likely to be in the program for a longer period had fewer substance abuse and criminal behavior, and also had a higher rate of employment and attendance at school than those who had been in the program for a shorter period. They suggested that these inconsistent findings were due to inappropriate comparisons, such as heterogeneity of clients and therapeutic programs and the use of different durability measures.

Considering that Welfare Organization financially supports TC and residential centers for substance abuse treatment and there was no study to compare the effectiveness of these two types of centers, this comparative study tried to investigate the effectiveness of them on substance abuse recurrence and self-destructive behavior in North Khorasan Province, Iran.

Methods

The study purpose was to investigate the

effectiveness of addiction rehabilitation in TC and residential centers in preventing substance recurrence and reducing destructive behaviors of substance abusers. Since the clients of these centers at the admission time are at distress level and under substance effects, they poorly participate in filling in the forms and interviews. Therefore, there was no possibility to evaluate them before starting the treatment and since they did not refer at the same time with each other to these centers but volunteered at various times, presenting a treatment in residential centers was not under researcher's control. The current study merely tried to investigate the effectiveness of conventional treatments in these centers. The study method was causal-comparative.

The statistical population was all the substance abusers who referred to TC and residential centers that were under the supervision of of North Welfare Organization Khorasan Province. There is one TC center 15 residential centers under supervision of Welfare Organization in North Khorasan Province. Among 15 residential centers, 4 were randomly selected: one from Shirvan, one from Farouj, one from Ashkhaneh, and one from Bojnord. Therefore, 4 residential centers were selected using cluster random sampling method. Considering that there was only one TC center available in the province, it was selected as the sample. The number of participants from residential centers was 15 and 15 were selected from TC center. The mean age of participants of residential centers was 30.57 years and the standard deviation (SD) was 9.04 and for TC center, it was 38.21 and 9.74 years, respectively. The duration of addiction for the participants of residential centers was 11.00 years with the SD of 8.94, and for TC participants, it was 13.15 years with the SD of 9.64.

Resuscitation Predictor Scoring Scale (RPS scale): The questionnaire was designed by Kelly et al.²⁰ The test has two subscales of 45 items, each of which contains situations or modes that can include the mood of substance abuser who is in rehabilitation period and can tempt him to consequently return to substance abuse. The subject responds to this test based on a five-point Likert scale (0 = none, 1 = weak, 2 = medium, 3 = strong, 4 = very strong). In Iran, the Cronbach's alpha of this questionnaire was 0.93, and its correlation with the

Drug Abuse Screening Test (DAST) was 0.33, which was statistically significant.²¹ In the current research, the questionnaire reliability was 0.95 through Cronbach's alpha.

Self-Harm Inventory (SHI): This questionnaire was designed by Sansone et al.²² It is made of 22 items that analyze the direct and indirect self-destructive behaviors. The question form is yes/no and they evaluate behaviors that deliberately are designed to harm the subjects (such as substance abuse, alcoholism, or self-destructive behaviors). The designers reported that the accuracy of this questionnaire was 60.0% in the non-clinical sample and in the sample of subjects with borderline personality disorder (BPD), it was 81.5%. In Iran, the Cronbach's alpha of this questionnaire was 0.74.²³ In the current study, the questionnaire reliability was 0.80 through Cronbach's alpha.

Demographic questionnaire: This questionnaire evaluates items such as age, sex, type of treatment, duration of treatment, type of substance, number of substance quit, record of imprisonment, occupation, and education.

Researcher questionnaire for evaluating therapeutic centers' plans: The questionnaire has 10 items and evaluates cases like holding training family sessions, doctor's visits, prevention of slipping and recurrence, group training sessions, 12-step self-help activities, reading books, private counseling sessions, giving responsibility, and receiving medication. The questions' form was yes/no.

After random selection of TC and residential centers through cluster sampling, the required permission was obtained for performing evaluations and collecting data from Welfare Organization of North Khorasan Province. The study entering condition for participants was two weeks of staying in centers according to research records, the characteristics of the references affected the therapeutic outcomes, considering that there were only 15 people in TC center, it was tried to use residential centers for comparison since their clients were much higher. The selected participants from residential centers were homogenous with TC center in terms of number of quitting substance, type of substance abuse, education, occupation, and treatment duration. The participants were informed about the process of study and were ensured that their information would be kept confidential. The questionnaire data were analyzed by t-test and chi-square test via SPSS software (version 21, IBM Corporation, Armonk, NY, USA).

Results

First the participants' data and chi-square test results are presented for investigating the homogeneity of the demographic characteristics of participants in TC and residential centers, then the results of the independent t-test are presented for comparing centers for reducing self-destructive behaviors and prediction of substance abuse recurrence.

Table 1. Demographic characteristics of the participants and investigating the homogeneity of demographics in two types of center

Demographic variables		TC center	Residential center	χ^2	P
Duration of treatment	2 weeks to one month	3	4	9.35	0.096
	One month to 2 months	1	6		
	2 months to 3 months	1	2		
	3 months to 5 months	2	2		
	6 months	5	1		
	More than 6 months	3	0		
Prison history	Yes	5	7	1.68	0.190
•	No	10	8		
Education level	Primary school	4	4	6.21	0.180
	Secondary school	4	6		
	Diploma	3	5		
	Associates degree	3	0		
Occupation	Unemployed	2	2	1.05	0.780
•	Self-employed	9	8		
	Laborer	4	3		
	Employee	0	2		
Type of substance	Opium	3	2	2.17	0.540
• •	Stimulant substances	3	4		
	Several substances	9	9		

TC: Therapeutic community

Table 2. Means of predictive variables for substance recurrence and self-destructive behavior in therapeutic community (TC) and residential centers

Variables	TC center	Residential center	Т	P
	Mean \pm SD	Mean ± SD		
Substance recurrence	33.73 ± 27.50	40.67 ± 32.92	0.629	0.539
Self-destructive behavior	6.00 ± 3.25	9.33 ± 4.32	2.388	0.024
Presented treatment program	6.00 ± 2.39	6.60 ± 1.68	0.795	0.430

TC: Therapeutic community; SD: Standard deviation

Table 1 shows that there was no significant difference between the participants in TC and residential centers regarding the duration of treatment, the prison history, education, occupation, and type of substance (P > 0.050). Thus, we can attribute the difference of effectiveness of TC and residential centers on self-destructive behavior and the possibility of recurrence to demographic characteristics.

Table 2 shows that participants of TC center had a lower mean score in terms of substance recurrence than those in residential centers, but this difference was not statistically significant (P > 0.050). Table 2 also shows that self-destructive behaviors among participants in TC center are significantly lower than those in residential centers (P < 0.050). There was significant difference between TC and residential centers regarding presented treatment program (P > 0.050).

Discussion

The purpose of this study was to compare the residential and TC centers in preventing substance abuse recurrence and reducing self-destructive behaviors of substance abusers. The result showed that the possibility of substance abuse recurrence in TC center was less than residential centers, but there was no statistical significant difference. Community-based programs are organized in a collective atmosphere that encourages common sense and collective action, provides health and education services in the context of the community of peers, and forms the behavioral and personal responsiveness of the clients in the form of accountability for individual life and helping to run the center's programs. They introduce clean peer as the role model and clients attend at confrontational meetings in which they deny their beliefs and defense mechanisms. community-based programs will allow people to gradually break out of old friends' networks and communicate with the clean partners within the program.9 It seems that TC reduces the desire and

temptation of substance abuse by eliminating social defects and rebuilding social relationships and cognitive beliefs.

According to an analysis based on reports from clients in health centers, it was found that there was no significant difference between the programs performed in the two treatment groups of TC and residential centers. Probably the similarity of the centers' programs is a factor in the similarity of the effectiveness of the two therapies.

Also, according to social learning theories, the return or recurrence of substance abuse is a response to environmental symptoms that constantly comes to the minds of participants. In this regard, the determinant factors of recurrence and high-risk situations can be recognized. Two methods of TC and residential had similar mechanism for separating people from polluted and tempting environment and presenting peer patterns for removing the desire to substance abuse; thus, this similar mechanism can determine a similar effectiveness in reducing substance abuse recurrence of these two treatment methods.

findings consistent These were with Vanderplasschen et al.²⁴ review study which compared the effectiveness of TC about the indicators of improvement with interventions in 16 studies and found that only some cases had evidence for the effectiveness of TC. Gorski²⁵ presented a pattern for improvement of substance abuse recurrence. When clients try to get stable and quit instantly, their first improvement is when they learn how to live without substance, the second improvement is when they try to lead a normal life, and their final improvement is when they get on with their family and physiological problems in a long run. Gorski believed that the performance of most rehabilitation plans was great at primary stages but they could not satisfy the various needs of clients in later stages.

The results also demonstrated that self-destructive behaviors were significantly

different between two groups of TC and residential centers that TC were more effective in reducing destructive behaviors.

The findings of the current study were consistent with TC studies in prison which found that in comparison to common therapies, TC had positive effectiveness on criminal acts. ¹⁵⁻¹⁸ TC, along with a focus on reconstructing cognitive, social, personal, and behavioral accountability, provides participants with a good view of life, including integrity, trust, responsibility, and work conscience. Also TC has clear ethical positions that include prohibitions of hostile attitudes and behaviors, negative street values, and irresponsible behaviors or sexual abuse. The availability of these concepts in the TC programs and their provision to clients provide a ground for healthy living and reduce self-destructive behaviors.⁹

The strong point of the current research is controlling the demographic variables that affect the likelihood of recurrence of substance abuse and self-destructive behaviors, that was achieved by homogenizing participants in the two groups. The study also had some limitations. First of all, since the study was causal-comparative and it was not possible to control the disturbing therefore, variables, inferring the relationship between treatment provision and its effectiveness should be done cautiously. Second was the low number of TC clients which did not let us choose a big sample for the study. Third was not having access to the records of previous clients of the center to follow up the effectiveness of treatment of these two centers. Fourth, using selfreporting questionnaire in collecting data might lead to bias in reporting self-destructive behavior and temptation to substance abuse in clients.

Given the restrictions of this study, it is recommended that in the following researches the effectiveness of each conducted program in therapeutic centers on cognitive, behavioral, and emotional components be evaluated. It is also suggested that the following researches evaluate the relationship between treatment variables and their duration in a bigger scale. The next suggestion is doing the follow up for the previous clients of these centers and also using tools like interviews, observation, and other tools for collecting data about self-destructive behavior and substance abuse recurrence.

Conclusion

The findings of this study suggest that there was no significant difference between TC and residential centers in reducing substance abuse recurrence among substance abusers; but in terms of reducing self-destructive behaviors among substance abusers, TC was more effective.

According to the results, regarding presented treatment program, there was significant difference between TC and residential centers. Therefore, it is suggested that there should be more supervision on programs of TC and residential centers, so the reports would not be only on papers and the patients would be constantly observed given the motivation to keep their relationship with the center. Also, the treatment centers are recommended to have special plans to prevent recurrence, identify the causing recurrence, help psychological problems, have better family participation, and observe the clients after the treatment. Welfare Organization should also cooperate to remove the employment obstacles after treatment; so the subjects can get back to social and family life and find a job.

Conflict of Interests

The Authors have no conflict of interest.

Acknowledgements

The researchers are grateful to all the patients and staff of TC and residential centers that cooperated and helped carry out the study, along with Welfare Organization of North Khorasan Province.

References

- **1.** Vanderschuren LJ, Ahmed SH. Animal studies of addictive behavior. Cold Spring Harb Perspect Med 2013; 3(4): a011932.
- **2.** Perfas FB. Therapeutic community: A practice guide. New York, NY: iUniverse; 2003.
- 3. McKay JR, Franklin TR, Patapis N, Lynch KG.
- Conceptual, methodological, and analytical issues in the study of relapse. Clin Psychol Rev 2006; 26(2): 109-27.
- **4.** Pourafkari N. Comperhensive dictionary of psychology and psychiatry. Tehran, Iran: Farhang-e Moaser Publications; 2006. [In Persian].

- **5.** De Leo D, Heller TS. Who are the kids who self-harm? An Australian self-report school survey. Med J Aust 2004; 181(3): 140-4.
- **6.** Butler LS, McPherson PM. Is residential treatment misunderstood? J Child Fam Stud 2007; 16(4): 465-72.
- 7. Bates BC, English DJ, Kouidou-Giles S. Residential treatment and its alternatives: A review of the literature. Child Youth Care Forum 1997; 26(1): 7-51.
- **8.** Welfare Organization Assistant in Prevention and Treatment of Addiction. Specific protocol of recovery and rehabilitation in substance abuse disorder: Model of residential based on abstinence. Tehran, Iran: Iran Welfare Organization; 2015. [In Persian].
- **9.** Tims FM, Jainchill N, De Leon G. Therapeutic communities and treatment research. NIDA Res Monogr 1994; 144: 1-15.
- **10.** Sadrosadat SJ, Mohammadi-Rostam Kalateh Z, Keldi A. A study on the association between therapeutic community program and social relationship of previously addicated persons. J Rehab 2005; 6(3): 10-3. [In Persian].
- **11.** Yarmohammadi Vasel M. The efficacy of therapeutic community on life skills improvement and reduction of relapse in male addicts. J Kerman Univ Med Sci 2011; 18(4): 358-68. [In Persian].
- **12.** Shahmohammadi A, Kheyrabadi G. The effectiveness of therapeutic community on increasing hope level of the addicted clients of these centres. Research on Addiction 2011; 5(19): 71-85. [In Persian].
- **13.** Edelen MO, Tucker JS, Wenzel SL, Paddock SM, Ebener P, Dahl J, et al. Treatment process in the therapeutic community: Associations with retention and outcomes among adolescent residential clients. J Subst Abuse Treat 2007; 32(4): 415-21.
- **14.** Szalay L. Socialization into the therapeutic community culture. NIDA Res Monogr 1994; 144: 54-79.
- **15.** Sacks S, Chaple M, Sacks JY, McKendrick K, Cleland CM. Randomized trial of a reentry modified therapeutic community for offenders with co-

- occurring disorders: Crime outcomes. J Subst Abuse Treat 2012; 42(3): 247-59.
- **16.** Welsh WN. A multisite evaluation of prison-based therapeutic community drug treatment. Crim Justice Behav 2007; 34(11): 1481-98.
- **17.** Sullivan CJ, McKendrick K, Sacks S, Banks S. Modified therapeutic community treatment for offenders with MICA disorders: substance use outcomes. Am J Drug Alcohol Abuse 2007; 33(6): 823-32.
- **18.** Prendergast ML, Hall EA, Wexler HK, Melnick G, Cao Y. Amity prison-based therapeutic community: 5-year outcomes. Prison J 2004; 84(1): 36-60.
- **19.** Condelli WS, Hubbard RL. Client outcomes from therapeutic communities. NIDA Res Monogr 1994; 144: 80-98.
- **20.** Kelly JF, Hoeppner BB, Urbanoski KA, Slaymaker V. Predicting relapse among young adults: Psychometric validation of the Advanced WArning of RElapse (AWARE) scale. Addict Behav 2011; 36(10): 987-93.
- **21.** Sayed Alitabar SH, Habibi M, Falahatpisheh M, Arvin M. Reliability, validity and factor structure of Drug Abuse Screening Test. Community Health 2016; 2(4): 246-55. [In Persian].
- **22.** Sansone RA, Wiederman MW, Sansone LA. The Self-Harm Inventory (SHI): development of a scale for identifying self-destructive behaviors and borderline personality disorder. J Clin Psychol 1998; 54(7): 973-83.
- **23.** Tahbaz Hoseinzadeh S, Ghorbani N, Nabavi SM. Comparison of self-destructive tendencies and integrative self-knowledge among multiple sclerosis and healthy people. Contemporary Psychology 2011; 6(2): 35-44. [In Persian].
- **24.** Vanderplasschen W, Colpaert K, Autrique M, Charles R, Pearce S, Broekaert E, et al. Therapeutic communities for addictions: a review of their effectiveness from a recovery-oriented perspective. Scientific World Journal 2013; 2013: 427817.
- **25.** Gorski TT. The Cenaps model of relapse prevention: Basic principles and procedures. J Psychoactive Drugs 1990; 22(2): 125-33.

مقایسه درمان اعتیاد در مراکز اقامتی و درمان اجتماع مدار در پیشگیری از عود و کاهش رفتارهای تخریبی سوء مصرف کنندگان مواد

ملاحت امانی 🐠، هما صائمیان ۲، حسین رضوان دوست ۳

مقاله پژوهشي

چکیده

مقدمه: سوء مصرف کنندگان مواد به دلیل ماهیت اختلال، مزمن بودن و شرایط عود کنندگی، رفتارهای خودتخریبی گستردهای را نشان می دهند. برنامه های مختلفی برای درمان سوء مصرف مواد مطرح شده است. پژوهش حاضر با هدف مقایسه درمان اعتیاد در مراکز اقامتی و مراکز درمان اجتماع مدار در پیشگیری از عود و کاهش رفتارهای تخریبی سوء مصرف کنندگان مواد انجام شد.

روشها: جامعه مطالعه را کلیه سوء مصرف کنندگان مواد مخدر مراجعه کننده به مراکز اقامتی و مراکز اجتماع مدار تحت پوشش سازمان بهزیستی از گشت استان خراسان شمالی تشکیل داد. ۵ مرکز به صورت تصادفی خوشهای انتخاب گردید. ابزارهای خودگزارش دهی شامل مقیاس پیش بینی بازگشت (RPS یا Self-Harm Inventory) و پرسش نامه رفتارهای خود تخریبی (SHI یا Self-Harm Inventory) توسط مراجعانی که حداقل دو هفته از حضور آنها در درمان می گذشت، تکمیل شد.

یافتهها: دو روش درمانی از نظر کاهش میل به مصرف مواد، تفاوت معنیداری با هم نداشتند. همچنین، درمان اجتماع مدار در کاهش رفتارهای خود تخریبی، اثربخش تر از درمان اقامتی بود.

نتیجه گیری: با توجه به اثرات مثبت درمان اجتماع مدار برای افزایش ماندگاری معتادان در درمان، برنامه های انگیزشی تدوین گردد.

واژگان کلیدی: درمان اجتماعمدار، درمان اقامتی، عود، مصرف مواد، رفتارهای تخریبی

ارجاع: امانی ملاحت، صائمیان هما، رضوان دوست حسین. مقایسه درمان اعتیاد در مراکز اقامتی و درمان اجتماع مدار در پیشگیری از عود و کاهش رفتارهای تخریبی سوء مصرف کنندگان مواد. مجله اعتیاد و سلامت ۱۳۹۷؛ ۱۱ (۱): ۵۰-۴۳.

۱- گروه روان شناسی، دانشکده علوم انسانی، دانشگاه بجنورد، بجنورد، ایران

۲- مرکز مشاوره، دانشگاه کوثر بجنورد، بجنورد، ایران

۳- سازمان بهزیستی، خراسان شمالی، بجنورد، ایران

نويسنده مسؤول: ملاحت اماني