



# Therapeutic Community Program for Opioid-Dependent Treatment Seekers

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## Abstract

**Background:** Therapeutic community program (TCP) is available for opioid users in Iran (Persia), the most populous Persian Gulf country. TCP can reduce opioid use and some associated harms. However, there are few studies about TCP in Iran.

**Objectives:** The current qualitative study aimed to explore the self-perceived positive and negative aspects of TCP among a group of Persian opioid users in Tehran.

**Methods:** The study was conducted at a large men-only TC center between December 2010 and July 2011. Overall, 50 opioid users were interviewed in eight roundtable meetings. Nine key informants were individually interviewed. NVivo 10 was used to thematically analyze the data.

**Results:** The mean age of the participants was 38 (SD = 9) years. Participants were dependent on opioids. The thematic data analyses indicated that peer support, group meetings, and the lack of medications were the most frequently self-perceived positive aspects of TCP. Untreated withdrawal symptoms, long duration of residence, anxiety, and depression were the most frequently reported negative aspects of TCP.

**Conclusions:** The identified positive treatment aspects should be considered to improve the TCP quality. The identified negative treatment aspects should be managed in the provision of TCP.

**Keywords:** Drug, Harm Reduction, Health, Iran, Therapeutic Community Program

## 1. Background

The use of opioids is a health problem in Iran (Persia). The recent findings from the household mental health survey (Iran MHS) indicated that the prevalence rates of 12-month substance use disorders were 2.09% and 2.44%, respectively. Opium use was the most frequently reported illicit drug. Overall, 40% of the interviewees with opioid dependence reported unmet drug treatment needs in the last 12 months (1).

The considerable prevalence of opioid use in Iran demands an effective treatment. Therefore, methadone substitution treatment has been provided by public and private health sectors on a large scale (2). The other treatment is therapeutic community program (TCP) which is provided by the Rebirth Society (3). Rebirth Society is the largest non-governmental organization in Iran and

Western Asia which provides standard drug treatment and harm reduction programmes for illicit drug users (2).

TCP in Iran applies an internationally-approved self-help approach. TCP provides a drug-free environment in which Persian people with opioid use problems live together to gain control over their lives. This voluntary program takes at least 30 days and can be extended for several months. TCP is accompanied with 12-step meetings, individual and family counselling sessions, as well as some recreational and exercise facilities (3).

TCP has multiple benefits. Studies indicate that TCP can lead to an increased abstinence from drugs. Furthermore, the provision of TCP can lead to improved psychological well-being, physical health (4, 5), and social functioning (6, 7).

There are few studies of TCP in Iran (8). For example,

Iran MHS indicated that out of 7 841 interviewees, only 2.0% reported drug treatment in the last 12 months; 13.9% reported using TCP (1). A study of 71 opioid-dependents on TCP was conducted in Tehran. Half of the participants received relapse prevention techniques (RPT) while the remaining participants received TCP only. Participants were followed 45 and 90 days after the treatment discharge by taking urine specimens. Compared with the control group, the RPT group provided more urine specimens free from opioid use (9). A study followed 378 Persian patients on TCP during seven years. Among them, 240 patients completed the treatment. In the sixth year, 22% of the patients reported opioid abstinence. General health was more improved in the abstinent group than the non-abstinent group (3).

Almost two decades have passed since the establishment of TC centers in Iran (8). However, few studies have been published about TCP. It is not clear how TCP has contributed to the treatment of opioid users. Identifying the positive and negative aspects of TCP is necessary because this may promote the TCP outcomes.

## 2. Objectives

The current qualitative study aimed to investigate the positive and negative aspects of TCP in male opioid users.

## 3. Materials and Methods

### 3.1. Design and Settings

The study design was qualitative. The study was conducted at a men-only TC center in Tehran between December 2010 and July 2011.

### 3.2. Participants

All opioid-dependent men at the study site were eligible to enter the study if they 1) were at least 18 years old and 2) reported being in treatment for at least 20 days. Exclusion criteria included reporting drug-related symptoms and/or severe psychiatric problems. Potential candidates were approached by the manager or the psychologist of the center. Participants were referred to a research coordinator for screening and enrolment.

### 3.3. Measure

A guide was developed to facilitate the interviews. The guide included information on demographic details, illicit drug use, and treatment history. Part of the guide included open questions about TCP aspects.

### 3.4. Data Analysis

Interviews were transcribed verbatim and reviewed for accuracy. All data were imported into NVivo 10 for management and coding. Data were coded by two research team members (O.M and S.S) who met regularly with the interview team (Z. AM and A.M).

### 3.5. Quality Control

According to the grounded theory of Strauss and Corbin (1998), data triangulation is an important part of validating qualitative data (10). Triangulation refers to the use of more than one method (11). Different methods of sample taking were applied to triangulate the data. More than one researcher collected and interpreted the data. The research team used prolonged exposure at the TC center, and member checks for methodological triangulation. In that way, potential research bias and systematic errors were managed.

### 3.6. Ethical Considerations

Consent form was obtained. Participation was confidential and voluntary. The study was part of a larger study which was approved by Tehran University of Medical Sciences (TUMS).

### 3.7. Study Procedure

After the purpose of the study was explained, 50 opioid users were interviewed in eight roundtable meetings. Roundtable meetings were conducted by the authors (Z. AM and A. M). Each roundtable meeting took 65 to 90 minutes and was audio-taped. Participants received small gifts for participation.

Nine key informants (KIs) were individually interviewed. KIs included two clinical psychologists, the center manager, two doctors, two social workers, a nurse, and a psychiatrist. All KIs had at least four years of work experience at TC centers. Individual interviews were facilitated by the authors (O.M and S.S). Each individual interview took 50 to 60 minutes and was audio-taped. Roundtable meetings and individual interviews continued until no new theme emerged in four consecutive reports. In that way, data saturation (10, 11) was done.

## 4. Results

### 4.1. Demographics and Drug Use

All participants were men. The age range was 27-52 years. The mean age was 38 (SD = 9) years. Twenty participants were married. Fourteen participants were divorced and the remaining participants were widowers (n = 7), separated (n = 5), and single (n = 4). Forty-four participants

had less than nine years of schooling while six participants had more than nine years of schooling. Forty-five participants had stable living conditions while five participants were homeless. Thirty participants were unemployed and twenty participants were employed. The initial age of opioid use was 16 (SD = 8) years. The duration of opioid dependence was 10 (SD = 9) years. The main route of opioid use was smoking (100%). Participants were on TCP for 22-65 days.

#### 4.2. The Positive Treatment Aspects

##### 4.2.1. Peer Support

The quotes taken from roundtable meetings repeatedly demonstrated that participants had similar opioid-related problems such as unemployment and family disintegration. However, the supportive roles of other opioid users acted as positive factors and facilitated their residence on TCP.

A 43-year-old man reported:

'...My wife wants divorce...I feel anxious but other addicts support me. This is necessary for my recovery...'

The center manager reported:

'...Most clients rely on the emotional support of their peers. They need to be understood by their counterparts...'

##### 4.2.2. Group Meetings

The TC center had regular and voluntary group meetings which were directed by a registered psychologist. Some participants and KIs explained how daily or weekly group meetings at the TC center were positive for recovery. Participants reported positive attitudes towards discussing their opioid use problems because they believed that group meetings were full of spirituality and mutual understanding.

A 33-year-old man reported:

'...I like group meetings...Meetings are always full of spirituality... They encourage you to believe in the treatment...'

A social worker reported:

'...Most patients are at this center because of our weekly or daily group meetings. They need to talk with other clients and feel self-confident...'

##### 4.2.3. Lack of Medications

Some participants believed that medications such as methadone were not safe to take. Some of them believed that taking methadone would lead to tooth decay, dependence, stomach problems, and poor sexual performance. More than three quarters of the participants reported lifetime taking methadone and/or buprenorphine at drug treatment clinics. However, KIs believed that participants

liked to try every opioid treatment and this was part of their problems with taking medications.

A 52-year-old man reported:

'...Methadone leads to tooth decay. I like TC because they prescribe no medication...'

A doctor reported:

'...Most patients are at this center because they prefer to quit opioid use without taking a medication... They try any way to quit opioid use...'

#### 4.3. The Negative Treatment Aspects

##### 4.3.1. Untreated Withdrawal Symptoms

A theme that gradually emerged from the narratives was the notion of untreated withdrawal symptoms. These included physical pain, vomiting, diarrhoea, stomachache, and headache especially in the first week of the treatment. This concept was misleading because participants described how experiencing opioid-related withdrawal symptoms was negative. However, KIs believed that experiencing withdrawal symptoms was part of recovery and participants needed more patience.

A 27-year-old man reported:

'...I had vomiting and diarrhoea in the first week of treatment...physical pain was my problem...'

A psychiatrist reported:

'...We recommend continued treatment, but some people don't like to suffer the consequences of opioid dependence and pass the recovery procedure...'

##### 4.3.2. Long Duration of Residence

A theme that emerged from the interviews was a misconception about the long duration of residence on TCP. KIs described that participants had voluntarily entered the treatment and had been informed about the length of residence before admission. Some KIs believed that thirty days of residence was not long and participants had misconceptions about the length of TCP. KIs believed that participants did not care about the length of residence before the treatment entry. However, residence on TCP provided an opportunity for them to think of the treatment length.

A 36-year-old man reported:

'...I decided to leave the treatment in the first week. It is too long...I was worried about my family...'

A psychologist reported:

'...Some people show no patience...They should know that this treatment needs long residence. However, some of them think their residence needs a lot of fun to look shorter...'

#### 4.3.3. Anxiety and Depression

Participants demonstrated how physical pain, being away from family members, and worrisome about employment and future led to experiencing anxiety and depression on TCP. KIs believed that anxiety and depression were normal parts of the problem and participants lacked adequate cognitive-behavioral skills to cope with opioid-related and life problems.

A 38-year-old man reported:

'...I feel anxious. I think of my family, job, and future. These problems make me anxious...'

A social worker reported:

'...Depression and/or anxiety are normal parts of opioid abstinence on TCP. They need more training in coping skills...'

## 5. Discussion

The study results indicate that peer support was the most important positive treatment aspect. Peer support may lead to increased emotional affiliations and supportive behaviors. Peer support is likely to lead to sustained recovery. A study indicates that peer support can facilitate recovery from illicit drug use (12). More studies should be conducted on those aspects of peer support which may maintain recovery from opioid use.

Group meetings were other positive treatment aspects. Spirituality in the group meetings was likely to improve participants' self-confidence and mental health. A study indicated that spirituality and religious practices led to sustained recovery and drug rehabilitation (13). Further studies are suggested.

Lack of medications was another positive treatment aspect. This issue was likely to be related to the willingness of the participants to quit opioid use in an abstinence-based way. Successful recovery among opioid-dependent people is associated with drug-free lifestyles and sustained rehabilitation (14) rather than taking medications (15).

Participants reported that they experienced withdrawal symptoms probably because of opioid dependence. Some KIs highlighted the necessity of patience. There is a paucity of research on opioid-related withdrawal symptoms and their effects on TCP residence. Counselling sessions and motivational interviewing may increase patience among such clients. Further studies are suggested to determine the nature of this association.

Long duration of residence was another negative treatment aspect. Participants were likely to be tired of long days of being at the TC center. The length of stay in the drug treatment is a concern for illicit drug users (16, 17). However, low relapse rates are associated with long treatment residence (4). Treatment residence for more than

six months is associated with improved quality of life (14). More recreational and educational facilities should be provided to make the residence of opioid users on TCP appealing.

Anxiety and depression were other negative treatment aspects. Anxiety and depression were likely to be the consequences of adverse health impacts of opioid use for a long time, as well as familial, social, and financial problems. A study of 322 residents at a TC center indicated that participants reported depression and anxiety (16-19). This may lead to treatment dropout. A study indicated that poor psychological well-being was a strong predictor of dropping out from TCP (20). Some KIs highlighted the roles of some psychological services such as training in life skills. The integration between TCP and psychological services needed (5). Prescribing psychiatric medications and providing mental health services are suggested.

The current study has several limitations. The study was limited to male clients at a TC center. Second, the study was limited to Tehran. Therefore, the study results may not be generalizable to other parts of Iran. Conducting further studies is suggested.

### 5.1. Conclusion

The study findings highlighted several positive aspects which should be strengthened in the treatment of opioid users on TCP. The identified negative treatment aspects should be more investigated and reduced in the provision of TCP.

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## Footnotes

**Authors' Contributions:** Omid Massah and Ali Farhoudian designed the study. Zahra Alammehrjerdi and Afsaneh Moradi conducted the interviews. Sara Shisheghar and Zahra Alammehrjerdi designed the research data set and performed data analysis. Zahra Alammehrjerdi and Kate Dolan wrote the manuscript. All authors read and approved the final manuscript paper.

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## References

1. Amin-Esmaeili M, Rahimi-Movaghar A, Sharifi V, Hajebi A, Radgoodarzi R, Mojtabei R, et al. Epidemiology of illicit drug use disorders in Iran: prevalence, correlates, comorbidity and service utilization results from the Iranian Mental Health Survey. *Addiction*. 2016;**111**(10):1836-47. doi: [10.1111/add.13453](https://doi.org/10.1111/add.13453). [PubMed: 27177849].
2. Alam-mehrjerdi Z, Noori R, Dolan K. Opioid use, treatment and harm reduction services: the first report from the Persian Gulf region. *J Substance Use*. 2014;**21**(2):217-23. doi: [10.3109/14659891.2014.966344](https://doi.org/10.3109/14659891.2014.966344).
3. Sadir N, Shojaei M, Moadab K, Abbasi R, Bahrapour A, Nakhaee N. Outcome evaluation of therapeutic community model in Iran. *Int J Health Policy Manag*. 2013;**1**(2):131-5. doi: [10.15171/ijhpm.2013.24](https://doi.org/10.15171/ijhpm.2013.24). [PubMed: 24596852].
4. Brunette MF, Mueser KT, Drake RE. A review of research on residential programs for people with severe mental illness and co-occurring substance use disorders. *Drug Alcohol Rev*. 2004;**23**(4):471-81. doi: [10.1080/09595230412331324590](https://doi.org/10.1080/09595230412331324590). [PubMed: 15763752].
5. 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. doi: [10.1016/j.jsat.2011.07.011](https://doi.org/10.1016/j.jsat.2011.07.011). [PubMed: 21943810].
6. Laudet AB. The road to recovery: where are we going and how do we get there? empirically driven conclusions and future directions for service development and research. *Subst Use Misuse*. 2008;**43**(12-13):2001-20. doi: [10.1080/10826080802293459](https://doi.org/10.1080/10826080802293459). [PubMed: 19016176].
7. Lyons T, Shannon K, Pierre L, Small W, Krusi A, Kerr T. A qualitative study of transgender individuals' experiences in residential addiction treatment settings: stigma and inclusivity. *Subst Abuse Treat Prev Policy*. 2015;**10**:17. doi: [10.1186/s13011-015-0015-4](https://doi.org/10.1186/s13011-015-0015-4). [PubMed: 25948286].
8. Alam-Mehrjerdi Z, Abdollahi M, Higgs P, Dolan K. Drug use treatment and harm reduction programs in Iran: a unique model of health in the most populated Persian Gulf country. *Asian J Psychiatr*. 2015;**16**:78-83. doi: [10.1016/j.ajp.2015.06.002](https://doi.org/10.1016/j.ajp.2015.06.002). [PubMed: 26168763].
9. Maarefvand M, Eghlima M, Rafiey H, Rahgozar M, Tadayyon N, Deilamizadeh A, et al. Community-based relapse prevention for opiate dependents: a randomized community controlled trial. *Community Ment Health J*. 2015;**51**(1):21-9. doi: [10.1007/s10597-014-9772-1](https://doi.org/10.1007/s10597-014-9772-1). [PubMed: 25091720].
10. Strauss A, Corbin J. Basics of qualitative research: grounded theory procedures and techniques. California: USA: Newbury Park, Sage Publications; 1991.
11. Pope C, Mays N. Qualitative Research: reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *BMJ*. 1995;**311**(6996):42-5. doi: [10.1136/bmj.311.6996.42](https://doi.org/10.1136/bmj.311.6996.42).
12. Boisvert RA, Martin LM, Grosek M, Clarie AJ. Effectiveness of a peer-support community in addiction recovery: participation as intervention. *Occup Ther Int*. 2008;**15**(4):205-20. doi: [10.1002/oti.257](https://doi.org/10.1002/oti.257). [PubMed: 18844242].
13. Heinz AJ, Disney ER, Epstein DH, Glezen LA, Clark PI, Preston KL. A focus-group study on spirituality and substance-user treatment. *Subst Use Misuse*. 2010;**45**(1-2):134-53. doi: [10.3109/10826080903035130](https://doi.org/10.3109/10826080903035130). [PubMed: 20025443].
14. Babaie E, Razeghi N. Comparing the effects of methadone maintenance treatment, therapeutic community, and residential rehabilitation on quality of life and mental health of drug addicts. *Addict Health*. 2013;**5**(1-2):16-20. [PubMed: 24494153].
15. De Maeyer J, Vanderplasschen W, Camfield L, Vanheule S, Sabbe B, Broekaert E. A good quality of life under the influence of methadone: a qualitative study among opiate-dependent individuals. *Int J Nurs Stud*. 2011;**48**(10):1244-57. doi: [10.1016/j.ijnurstu.2011.03.009](https://doi.org/10.1016/j.ijnurstu.2011.03.009). [PubMed: 21481390].
16. Metrikin AS, Galanter M, Dermatis H, Bunt G. Somatization, anxiety and depression in a drug-free residential therapeutic community. *Am J Addict*. 2003;**12**(1):60-70. [PubMed: 12623741].
17. Reback CJ, Veniegas R, Shoptaw S. Getting Off: development of a model program for gay and bisexual male methamphetamine users. *J Homosex*. 2014;**61**(4):540-53. doi: [10.1080/00918369.2014.865459](https://doi.org/10.1080/00918369.2014.865459). [PubMed: 24245506].
18. Hikitsuchi E, Okazaki S, Yamasaki A, Matsumoto T. Development and evaluation of a therapeutic community model in Japan: use of an encounter group method. *Nihon Arukoru Yakubutsu Igakkai Zasshi*. 2015;**50**(5):206-21. [PubMed: 26946782].
19. Chen VC, Wu MH, Lin TY, Ho YF, Wang HY, Gossop M. Comparison of socio-demographic characteristics, substance, and depression among male heroin users attending therapeutic community and methadone maintenance treatment program in Nantou, Taiwan. *Subst Abuse Treat Prev Policy*. 2015;**10**:41. doi: [10.1186/s13011-015-0037-y](https://doi.org/10.1186/s13011-015-0037-y). [PubMed: 26507876].
20. Deane FP, Wootton DJ, Hsu CI, Kelly PJ. Predicting dropout in the first 3 months of 12-step residential drug and alcohol treatment in an Australian sample. *J Stud Alcohol Drugs*. 2012;**73**(2):216-25. [PubMed: 22333329].