

The Results of Drug Dependence Treatment by Therapeutic Community in Thanyarak Institute on Drug Abuse

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Abstract

A study of drug dependence treatment by therapeutic community (TC) in Thanyarak Institute on Drug Abuse from 1986 to 2000 was undertaken. 2,881 cases joined the TC program during this period (males 2,471 or 85.8%, females 410 or 14.2%). There were 278 cases who completed the TC program (males 261 or 93.9%, females 17 or 6.1%). The program course is at least one and a half year. The average duration of treatment in TC for the completion group was 27.6 ± 7.1 months. The mean age was 30.9 ± 6.4 years. About half of them had had a high school education. The majority (84.6%) of them were IV heroin addicts. The average drug-use duration was 9.8 ± 5.7 years. After they completed the program, the clients were followed-up for five years. 203 cases (73.0%) were abstinent from drugs. Of this figure 21 cases (7.6%) had died during the follow-up from illness and accidents not directly related to relapsing to drugs. 75 cases (27.0%) relapsed to drugs. There were no significant differences between the abstinent and relapse cases in age, education, marital status, characteristic of addiction, previous treatment data and I.Q. Duration of treatment in the abstinent cases was longer (3.7 months) than the relapse cases. Significant differences ($p < 0.05$) were found in some personality characteristics. The relapse cases were neurotic-introversion personality type and had abnormal scores with low or high scores in hypersensitive character. They were likely to be easily stimulated to go back to using drugs. Although the TC program required much time and material resources to operate, the results of treatment were highly effective. The results of this study provide the rational to expand this TC program in order to provide more opportunities to the increasing demands for an effective treatment intervention for Thai addicts.

Key word : Therapeutic Community, Drug Dependence Treatment

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In Thailand, addiction is viewed as a serious health, crime, social, and national security problems (1,2). Thanyarak Institute on Drug Abuse (TIDA), under the Department of Medical Services of the Ministry of Public Health was established in 1959(3) to serve as the national treatment center for narcotic addicts. Treatment of addiction in Thanyarak especially heroin had four phases: preadmission, detoxification, rehabilitation, and follow-up respectively. For many years, treatment results were discouraging because of the high dropout rate from the unwillingness of the addict to undergo the rehabilitation process(4).

In 1985, the therapeutic community (TC) model was introduced to TIDA with the assistance of Daytop Sweden through the UNISWED(5) Foundation. The Thanyarak therapeutic community (TTC) was run as a voluntary treatment program for those who had completed the detoxification program. TTC had impressive results when compared with the previous rehabilitation measures. As a result, the Thai government supported the TTC program to expand to three male units (50 beds per unit) and one female unit (30 beds). The capacity of the male TC was 50 beds per unit and capacity of female TC was 35 beds.

The treatment course in TTC took at least one and a half years to complete. The TC approach included conventional techniques used in the Daytop (6) model in the USA. Basically, TC is like a big family that provides new conditions and opportunities for the addict to reconstruct their mind and body. They live and work together under special supervision. Daily activities may create internal and interpersonal stresses. Individual and group psychotherapy and certain TC techniques or therapeutic "tools" are employed to shape behaviors and help clients develop insight. The unhealthy behaviors are reconditioned. Many beneficial activities are implemented in order to reorient the personal values and attitudes of the addicts and help them acquire the ability to live independently without drugs when they return to a real social situation.

The TC has four treatment stages: 1) Induction or Motivation stage between 7 to 30 days, 2) Treatment stage about a year, 3) Re-entry stage about 6 months, and 4) Aftercare stage which can last up to 5 years.

The two major principles of the program(7) are:

1. Promotion of self-help life style(8).
2. Emphasis on group pressure to change behaviors toward a healthy character.

Various therapeutic measures, which are called "tools of the house", are part of the daily life of the residents of the TC during the treatment stage. The therapeutic measure may be classified into 3 types.

1. Group therapy. Many group processes are scheduled such as group psychotherapy, morning group meeting, house meeting, self-help group meeting and group seminar etc.

2. Work therapy. Several kinds of work were assigned for residents to develop occupational skills and responsibility. Some of these tasks are integral parts of the daily operational needs of TC such as house keeping, kitchen, business office, etc. There are also formal occupational learning activities, for example, art work, wood-work, metal-work, farming, gardening etc.

3. Behavior therapy. Many therapeutic activities in the TC are designed to shape behaviors through a process called the "learning experience".

After completion of the treatment stage, the following 6 months of the re-entry stage would prepare residents to retry to live an ordinary life in a real social situation outside TC during day-time. Certainly, many bad experiences usually recur. The re-entry program provides the opportunity for residents to feel reinforced and supported by each other. They must have an organized plan for their future on how to live competently and responsibly. Residents become stronger and learn to cope with the daily problems of living and gain confidence to live outside the TC. In the after care stage, clients are followed-up for 5 years in order to monitor their drug-free status and to support the clients who are at high risk to relapse.

METHOD

A retrospective study that involved a cohort of clients who completed the Thanyarak Institute (TIDA) residential TC program from 1986 to 2000 was conducted. The study aimed to find out the treatment outcome of those who completed the Thanyarak Therapeutic Community (TTC) program. The record pool from the statistical center of TIDA about demographic data, addiction data, and personality profiles were reviewed. To find out some of the risk and protective factors of relapse in the clients who

completed the TTC program, the Standard Progressive Matrices (I.Q.) by J.C. Ravens, Maudsley Personality Inventory (MPI) (9) by M.J. Eysenck and Modified Psychometric Index of Character Structure (PICS)(10) by Jack J. Monroe were studied. The cohort was followed-up by the Thanyarak personnel during the aftercare stage of treatment. The follow-up consisted of home visits or the clients coming in to the office for their appointment. They were also engaged through social activities and festivities held in TIDA.

RESULTS

From 1986 to 2000, there were 2,881 cases who joined the Thanyarak TC program (males 2,471, females 410) and only 278 cases completed the TC program (males 261 cases or 93.9%, females 17 cases or 6.1%). In the after-care stage (5 years follow-up), there were 203 abstinent cases (73.0%) that included 21 dead cases. There were 75 (27.0%) relapse cases of those who completed the drug free, self help program. Regarding the relapse cases, the first to the fifth year cumulative abstinent rates were 91.3, 81.1, 76.6, 73.6 and 72.4 per cent respectively as shown in Table 1.

Of the 278 cases that completed the TC, only 247 data records were completed and available for analyses. (males 236 cases, females 11 cases, 184 abstinent cases and 63 relapse cases)

Average age

30.9 \pm 6.4 years. For the 184 abstinent cases the average was 30.5 \pm 6.7 years and for the 63 relapse cases it was 31.6 \pm 5.7 years.

Marital status

There were 183 single cases (74.1%), 37 (15.0%) married and 27 (10.9%) divorced or separated.

Geographic distribution

56.3 per cent of the cases lived in Bangkok.

24.3 per cent of the cases lived in the central part of Thailand, 8.1 per cent in the North, 7.3 per cent in the South and 4.0 per cent in the North-east

Education

49.4 per cent of the cases were high school level.

33.2 per cent of the cases were elementary school level as shown in Table 2.

Occupation

70.4 per cent of the cases were laborers

Table 1. Calculating the cumulative abstinent rates.

(1) Interval since beginning follow-up	(2) Abstinent at beginning of interval	(3) Relapse during interval	(4) Dead during interval	(5) Effective number exposed to risk of relapse during interval	(6) Proportion who relapse during interval	(7) Proportion abstinent who during interval	(8) Cumulative proportion who abstinent from enrollment to end of interval: Cumulative abstinent
1st year	278	24	3	276.5	0.087	0.913	0.913
2nd year	251	28	4	249	0.112	0.888	0.811
3rd year	219	12	4	217	0.055	0.945	0.766
4th year	203	8	6	200	0.04	0.96	0.736
5th year	189	3	4	187	0.016	0.984	0.724

Table 2. Education.

Level of Education	Abstinent cases N = 184	Relapse cases N = 63	Total	%
1. No formal education	2	1	3	1.2
2. Elementary school	56	26	82	33.2
3. High school	93	29	122	49.4
4. Polytechniques school	30	7	37	15.0
5. University	3	0	3	1.2

Table 3. Patient treatment history and duration of treatment in the TC.

	Abstinent cases (N = 184)	Relapse cases (N = 63)
Average times of detoxification (times)	5.0 ± 4.1	5.8 ± 4.6
Average duration in the TC (months)	29.2 ± 7.1	25.5 ± 5.9

Characteristics of addiction

Type of addiction: 209 cases (84.6%) were IV heroin addicts, 13 cases were volatile substance abusers, 6 cases were alcoholics, and 19 cases were methamphetamine users.

Average duration of addiction: 9.8 ± 5.7 years

Treatment history and duration of treatment in TC program

The average number of times they came for detoxification was 5.2 ± 3.8 times and average duration of treatment in the TC was 26.6 ± 6.8 months as shown in Table 3.

I.Q. and personality profile

There were 160 I.Q. tests and personality data records available for analyses.

The average I.Q. was 97.4 ± 10.7 . The relapse cases tended to have a neurotic introversion personality as shown in Table 4.

Life profile of the patients during after-care stage

Of the completion cases there were 152 cases that had stable, secure jobs during the after-care stage, 41 cases became ex-addict staff in Thanyarak and other TC's in Thailand. There were 13 cases who were sent abroad for further training in TC techniques (3 cases in Sweden, 6 cases in Italy, and 4 cases in the USA). The detail is outlined as follows:

1. Ex-addict staff			
Thanyarak TC	34		cases
Other TC in Thailand	7		cases
2. NGO's personnel	28		cases
3. Government personnel	11		cases
4. Metal-work, Electrician, Plumber, Cable-work	14		cases
5. Sale man	10		cases
6. Drivers	7		cases
7. Farmer, Gardener	7		cases
8. Security guard	6		cases
9. Buddhist Monk	5		cases
10. Other	23		cases

Table 4. I.Q. and personality profile.

Type of assessment	Abstinent cases (N = 119)	Relapse cases (N = 41)
I.Q.	97.5 ± 10.4	97.0 ± 10.8
MPI		
Neuroticism-Stability (N)* (scores)	24.5 ± 9.8	26.9 ± 9.9
Extroversion-Introversion (E)* (scores)	25.8 ± 7.3	23.5 ± 6.8
PICS		
Self Esteem (ES) Mean scores	3.4 ± 2.0	3.3 ± 1.9
Low	3	1
Normal	99	34
High	17	6
Emotional Deprivation (ED) Mean scores	3.6 ± 1.3	3.5 ± 1.2
Low	25	10
Normal	59	22
High	35	9
Social Maladaptation (SM) Mean scores	3.2 ± 1.4	3.5 ± 1.3
Low	13	2
Normal	68	23
High	38	16
Impulse Control (IM) Mean scores	3.9 ± 1.6	3.8 ± 1.5
Low	7	2
Normal	46	17
High	66	22
Hypersensitivity (HP)* Mean scores	3.6 ± 1.6	3.5 ± 1.8
Low	27	13
Normal	84	20
High	8	8
Acceptability for Psychotherapy (AP)	23.4 ± 3.9	23.9 ± 3.7
Low	21	4
Normal	84	30
High	14	7
Psychopathic Deviate Scale (PD)	23.9 ± 4.8	24.1 ± 5.2
Low	35	13
Normal	73	24
High	11	4

* p < 0.05

DISCUSSION

The cohorts in this study were compared with the country addiction data in 1993(11) of 82,620 cases. The comparison found no differences ($p > 0.05$) in sex, and type of addiction. However, there were significant differences in marital status and education ($p < 0.01$) with 74.1 per cent of the cohorts who were single, a figure higher than the country addicts (54.2%). One of the reasons that most of these clients in the TC preferred to remain unattached was for convenience or to be family burden-free during their long period of stay in the TC program. 65.6 per cent of the cohorts had a high school education. Half of the samples in the national data had an elementary education (47.7%). Having a higher education is an advantage in the social learning environment of the TC. In

fact, pretreatment educational level is one of the client characteristics associated with positive treatment outcome(12).

The results of the present study showed that the effectiveness of the Thai TC in Thanyarak Institute is quite comparable with other TCs(13). 73.0 per cent of the completion cases were free from drugs in the aftercare stage and 27.0 per cent had relapsed, mostly due to their previous environment and personality problems. The rate of relapse was highest during the second year (10.2%) of aftercare following completion of the residential treatment program. 8.7 per cent of the total relapse cases occurred during the first year. The high relapse rate during the second year of aftercare might be the result of the loosening of the social support from the TC as the client spent more

time reestablishing his life out in society. The difficulties of this transitional stage is markedly more serious in societies where there are limited options for addicts who are handicapped in several areas of social and vocational skills. After the second year of aftercare, the rate of relapse dramatically dropped possibly reflecting the stabilization process that was taking place in the overall life of the client after treatment.

Most of the cases lived in Bangkok and the central part of Thailand (80.6%) in close proximity to Thanyarak, which is less than an hour's drive from Bangkok.

The average duration of addiction of the cohorts was 9.8 ± 5.7 years. The addicts who had less than 5 years of addiction were less likely to join the TC program. The more experienced addicts had more insight and realized that the conventional program did not prevent relapse.

The comparison between abstinent cases (184 cases) and relapse cases (63 cases) showed no difference ($p > 0.05$) in sex, geographic distribution, occupation, education, type and duration of addiction, and I.Q. test, unlike other studies that showed differences in many factors⁽¹⁴⁾. For length of stay in the TC program, the abstinent cases seem to stay longer (3.7 months) than the relapse cases, the same as in another study⁽¹⁵⁾. The authors found that there was a significant difference ($p < 0.05$) in the personality between these two groups. The abstinent cases were scored higher on extroversion personality (25.8 ± 7.3) while the relapse cases neurotic (26.9 ± 9.9) and had introversion (23.5 ± 6.8). This indicated that the extroversion type was a good prognostic factor while neurotic-introversion personality type was a risk factor for relapse. Theoretically, the extroversion personality type person was more confident, secure, and friendly than the introversion personality type person.

In the Modified Psychometric Index of Character Structure, it was found that the relapse cases had abnormal scores, both low and high in Hypersen-

sitive Character. This might indicate that the relapse cases had labile mood and emotional vulnerabilities that could trigger relapse to drugs.

Although the TC program requires much time and resource to operate, the result of treatment was much more effective than any other treatment. The Thanyarak TC program was an effective treatment in Thailand because it was adapted to the Thai culture.

This study has many limitations. It would have been appropriate if comparisons were made between the dropouts and completion cases against established outcome variables of treatment. However, there were no meaningful follow-up data available for dropouts. Although it was observed that there was a higher rate of dropouts in the initial phase of treatment, the data for the dropout rates during the first two months in treatment were likewise not available. The retention rate during the first month and six months periods are useful information in evaluating the impact of treatment on clients.

It should be noted that the Thanyarak TC is one of the oldest TC in Thailand established in 1985 and the oldest of several government-initiated TC programs in the country. The cohorts in this study included completion cases from the time the TC was established in 1985 until 2000. Like most TCs, it took quite a while before the different treatment components of the Thanyarak TC were set in place and effectively operating. In the case of this Thai TC, the developmental process must have taken a little longer due to the cultural variables that have to be taken into account in the adaptation to Thai society, not to mention the need for an adequate number of sufficiently trained personnel to implement the new treatment concept. All things being equal, the results of this study were significant and confirmed what has been found in several studies⁽¹⁶⁾ that clients who stayed longer in treatment showed general improvement across several outcome measures than those who stayed for short periods of time.

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ผลการบำบัดรักษาผู้ติดยาเสพติดด้วยรูปแบบชุมชนบำบัด ของสถาบันธัญญารักษ์

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ได้ทำการศึกษาการบำบัดรักษาผู้ติดยาเสพติดด้วยรูปแบบชุมชนบำบัด ของสถาบันธัญญารักษ์ในช่วง 14 ปี (พ.ศ. 2529-2543) มีผู้เข้ารับการบำบัดรักษาในศูนย์ชุมชนบำบัด รวม 2,881 ราย (ชาย 2,471 ราย หญิง 410 ราย) อยู่ครบชั้นตอนของชุมชนบำบัดเป็นเวลาอย่างน้อย 1 ปี 6 เดือน รวม 278 ราย (ชาย 261 ราย หญิง 17 ราย) ในส่วนที่มีข้อมูลครบถ้วนนำมาศึกษารายละเอียดได้ของกลุ่มที่อยู่ครบการบำบัด พบร่วมอาชญากรรม 30.9 \pm 6.4 ปี ภูมิลำเนาส่วนใหญ่อยู่ในกรุงเทพฯ และภาคกลาง มากกว่าครึ่งหนึ่งมีการศึกษาอยู่ในระดับสูงกว่าประถมศึกษา และเป็นผู้ติดเชื้อเอชไอวี โดยการฉีดเข้าเลี้นร้อยละ 84.6 ซึ่งเฉลี่ยเสพติดมานาน 9.8 \pm 5.7 ปี ได้ติดตามผู้ติดยาเสพติดที่ครบชั้นตอนชุมชนบำบัดต่ออีกนาน 5 ปี พบว่า ยังสามารถเลิกได้ร้อยละ 73.0 กลับไปติดเข้าร้อยละ 27.0 ในรายที่ยังเลิกได้เสียชีวิตระหว่างติดตามร้อยละ 7.6 เมื่อศึกษาเปรียบเทียบกลุ่มที่ยังเลิกได้ กับกลุ่มที่กลับไปติดเข้าพบว่า ไม่แตกต่างกันอย่างมีนัยสำคัญทางสถิติของ อายุ ที่อยู่ การศึกษา การสมรส การติดยาที่ผ่านมา การบำบัดที่เคยได้รับ กลุ่มที่เลิกได้มีระยะเวลาที่บำบัดรักษาโดยชุมชนบำบัดนานกว่ากลุ่มที่กลับไปติดเข้า 3.7 เดือน ในส่วนที่แตกต่างอย่างมีนัยสำคัญทางสถิติ ($p < 0.05$) คือ ผู้กลับไปติดเข้ามีบุคลิกภาพแบบ ประสาท-เก็บดัว และมีสัดส่วนคะแนนความอ่อนไหวทางอารมณ์ ทั้งต่ำและสูงผิดปกติ มากกว่ากลุ่มที่ยังเลิกได้ แม้กระทั่งการบำบัดด้วยรูปแบบชุมชนบำบัดจะใช้เวลานานเป็นปี แต่ก็เป็นรูปแบบที่ได้ผลดี จึงควรที่จะพัฒนาให้เข้าเลี้นลง และขยายการบำบัดให้กว้างขวางต่อไป

ค่าสำคัญ : ชุมชนบำบัด, ผู้ติดยาเสพติด

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