

Drug dependence treatment by therapeutic community at Thanyarak Hospital (1986 -1997)

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- Objective** : *To review drug dependence treatment by therapeutic community at Thanyarak Hospital*
- Setting** : *Thanyarak Hospital, Department of Medical Services, Thailand*
- Design** : *Retrospective descriptive study*
- Subjects** : *Inpatient drug addicts who joined the Thanyarak therapeutic community from January 1986 to December 1997.*
- Methods** : *The data from record pools were reviewed in the area of demographic information, addiction data, the Standard Progressive Matrices for I.Q. Maudsley Personality Inventory (MPI) and Modified Psychometric Index of Character Structure (PICS)*
- Results** : *There were 2,489 cases that joined the TC program (male 2,237, female 252). There were 189 cases that completed one and a half year program (male 181; female 8), we found 180 records for analyzing. The mean age was 33.2 ± 6.5 years, with 65.0 % of the cases educated above elementary school. Of the cases, 91.1% were IV heroin addicts and the average drug-use duration was 12.3 ± 5.9 years. After they completed the TC program, the patients were followed up for 5 years. We found that 70.9% remained abstinent from drugs,*

which 7.9% of cases died. The other 29.1% of the cases relapsed. The average duration treatment in TC was 28.6 ± 7.2 months. Comparing the abstinent and relapse cases we found no difference in age, geographic distribution, education, marital status, characteristics of addiction, previous treatment, duration of treatment in the TC, I.Q. test and some personality characteristic. The significant differences ($p < 0.05$) was found in other personality traits. Relapse cases were of a neurotic-introversion personality type and had abnormal low and high scores in hypersensitive character, so they were easily stimulated to go back using drugs. Although the TC program was a significant time and resource consuming measure, the results of the treatment were effective. The Thanyarak TC program was effective for Thais because it was much of Thai culture style. It would be beneficial to multiply this program in order to rescue addicts who desperately need a drug-free life.

Key words : Drug dependence, Therapeutic community.

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- วัตถุประสงค์** : เพื่อศึกษาการบำบัดรักษาผู้ป่วยยาเสพติดด้วยวิธีชุมชนบำบัดของโรงพยาบาลธัญญารักษ์
- สถานที่ที่ทำการศึกษา** : โรงพยาบาลธัญญารักษ์ กรมการแพทย์
- รูปแบบการศึกษา** : การศึกษาย้อนหลังแบบพรรณนา
- ผู้ป่วยที่ได้ทำการศึกษา** : ผู้ป่วยในของโรงพยาบาลธัญญารักษ์ ที่เป็นผู้ป่วยติดยาเสพติดที่เข้ารับการรักษาด้วยวิธีชุมชนบำบัดตั้งแต่เดือนมกราคม พ.ศ.2529 ถึงธันวาคม พ.ศ.2540 เป็นเวลา 12 ปี
- วิธีการศึกษา** : รวบรวมศึกษาข้อมูลทั่วไป และการติดยาเสพติด ผลการทดสอบสติปัญญา และบุคลิกภาพ
- ผลการศึกษา** : พบว่ามีผู้เข้ารับการบำบัดรักษาในศูนย์ชุมชนบำบัด รวม 2,489 ราย (ชาย 2,237 ราย หญิง 252 ราย) อยู่ครบขั้นตอนของชุมชนบำบัดเป็นเวลาอย่างน้อย 1 ปี 6 เดือน รวม 189 ราย (ชาย 181 ราย หญิง 8 ราย) ในส่วนที่มีข้อมูลครบถ้วนนำมาศึกษารายละเอียดได้ 180 ราย พบว่ามีอายุเฉลี่ย 33.2 ± 6.5 ปี ภูมิลำเนาส่วนใหญ่อยู่ในกรุงเทพฯ และภาคกลาง ร้อยละ 78.9 มีการศึกษาอยู่ในระดับสูงกว่าประถมศึกษา คิดเป็นร้อยละ 65.0 และเป็นผู้ติดยาเสพติดชนิดผงขาว โดยการฉีดเข้าเส้นร้อยละ 91.1 ซึ่งเฉลี่ยเสพติดมานาน 12.3 ± 5.9 ปี ได้ติดตามผู้ติดยาเสพติดที่ครบขั้นตอนชุมชนบำบัดทั้ง 189 ราย ต่ออีกนาน 5 ปี พบว่ายังสามารถเลิกได้ร้อยละ 70.9 กลับไปติดยาซ้ำร้อยละ 29.1 ในรายที่เลิกได้อยู่เสียชีวิตระหว่างติดตามร้อยละ 7.9 เมื่อศึกษาเปรียบเทียบกลุ่มที่ยังเลิกได้ กับกลุ่มที่กลับไปติดยาซ้ำพบว่า ไม่แตกต่างกันอย่างมีนัยสำคัญทางสถิติของ อายุ ที่อยู่ การศึกษา การสมรส การติดยาที่ผ่านมากการบำบัดที่เคยได้รับ ระยะเวลาที่บำบัดรักษาโดยชุมชนบำบัดระดับสติปัญญา และลักษณะบุคลิกภาพโดยส่วนใหญ่ ที่แตกต่างกันอย่างมีนัยสำคัญทางสถิติ ($P < 0.05$) คือผู้กลับไปติดยาซ้ำมีบุคลิกภาพแบบประสาท เก็บตัว มีสัดส่วนคะแนนความอ่อนไหวทางอารมณ์ ทั้งต่ำและสูงผิดปกติ มากกว่ากลุ่มที่ยังเลิกได้

Drug and substance dependence impacts on health, crime, social, and national security problems.^(1,2) In Thailand, Thanyarak Hospital was opened in 1959⁽³⁾ by the government to provide treatment for drug addicts. The addiction treatment has four standard phases. These are preadmission, detoxification, rehabilitation and follow up. Initially, results of the treatment were unsatisfactory because of the high dropout rate in the rehabilitation phase.⁽⁴⁾

In 1985, the treatment program for the therapeutic community model was introduced to the hospital by UNISWAID,⁽⁵⁾ a foundation of Sweden. The Thanyarak therapeutic community was established then. As the results of the Thanyarak TC were impressive when compared with the results of the previous rehabilitation measures, the Thanyarak TC was supported by the government and increased to 3 male units and 1 female unit. The capacity for males was 50 beds per unit and for females was 30 beds per unit.

The Thanyarak TC program takes more than one and a half years. TC techniques were applied from the Synanon and Daytop⁽⁶⁾ Center in the USA. The TC was basically like a large family which provided new conditions and opportunities for patients to reconstruct their physical and psychological health. They lived and worked in groups under special supervision. The daily activity provoked internal and interpersonal conflicts. Individual and group psychotherapy was done. The unhealthy behaviors were reconditioned. Many beneficial programs were introduced in order to reconstruct personal integrity and ability to live independently from drug addiction when they returned to real social situations.

Materials and Methods

A 12 year retrospective study of the Thanyarak TC since its commencement in 1986 was performed. All of the patients were voluntary. After they had completed 21 days of the detoxification phase, some of them entered the TC program that followed the 4 stages. First was the Induction stage which lasted between 7-30 days, second was the treatment stage for at least 1 year, third was the re-entry stage for about 6 months and fourth was the after-care stage for about 5 years.

Two major principles of the TC program⁽⁷⁾ that rebuilt the persons mind and body were

1. Promotion of a self-help life style.⁽⁸⁾
2. Emphasis on group pressure to make the person change their behaviors toward a healthy character. Thus, all members in the TC helped promote a good environment for each other.

Various therapeutic measures, which were called tools of the house, were introduced into their daily activity during the treatment stage. The therapeutic measures may be classified into 3 types.

1. Group therapy: many group activities were scheduled such as group psychotherapy, morning group meeting, house meeting, self-help group meeting, group seminar etc.

2. Work therapy: many kinds of work were assigned in order to increase occupational skills and responsibility, such as woodwork, metalwork, farming, gardening, artwork, bakery, marketing etc.

3. Behavior therapy: many activities in the TC were instilled by reward or punishment in order to recondition the patients toward healthy behavior.

After the treatment stage the following 6 month re-entry stage prepared the patients to retry

having an ordinary life in a real social situation. In this latter stage the patients were allowed to stay and work outside the TC during the day. Certainly, many bad experiences occurred which the patients had to work through. The re-entry program provided an opportunity for the patients to disclose and ventilate their problems. The problems were discussed and the patients reinforced and supported each other. They were organized to plan for their future on how to live a worthy life, competently, with self respect and to take responsibility. The plan was discussed and a realistic goal was set. On each day of this re-entry stage the patients became stronger and found it easier to cope with daily problems. After the re-entry stage, the patients were evaluated whether or not they were competent enough to live outside the TC. The discharged patients were followed - up for 5 years in the after-care stage, in order to monitor their drug-free status and to support them in case a high risk relapse situation occurred.

The result of the TC program were evaluated. Data records from the statistical center of the hospital about demographics, addiction, the Standard Progressive Matrices (I.Q.) by J.C. Ravens, Maudsley Personality Inventory (MPI)⁽⁹⁾ by M.J. Eysench and Modified Psychometric Index of Character Structure (PICS)⁽¹⁰⁾ by Jack J. Monroe were studied to find the risk and protective factors of relapse in the patients who completed the Thanyarak TC program in order to improve the program efficiency.

Results

During 1986-1997, there were 2,489 cases that joined the Thanyarak TC program (males 2,237, females 252). There were 2,221 cases that dropped out of

the program and most of them dropped out in the first month. Although some cases dropped out later (some joined in more than one year). If the patients dropped out, They were not followed-up officially, thus there was no reliable data for analyzing.

There were 268 cases that passed the treatment stage (males 256, females 12). And there were 189 cases who completed the whole program (males 181 cases or 95.8%, females 8 cases or 4.2%). In the after-care stage (5 years follow-up), there were 134 abstinent cases (70.9%) that included 15 cases that died, and there were 55 relapse cases (29.1%).

Of these 15 fatalities, 4 died in the first year, 3 in the second, 3 in the third, 4 in the fourth and 1 in the fifth year. Regarding causes of death, 8 died of HIV infection, 4 by cirrhosis, 2 by accident and 1 was murdered.

Of the relapsed cases, the first to the fifth year relapse rates were 29.2, 43.6, 10.9, 10.9, and 5.4 %, respectively. For 189 completed TC cases, 180 data records for analyzing were found.

Average age

33.2 ± 6.5 years. For 128 abstinence cases it was 32.6 ± 6.7 years and for 52 relapse cases it was 34.6 ± 5.7 years.

Geographic distribution

55.0% of the case lived in Bangkok.

23.9% of the cases lived in the central part of Thailand, as shown in table 1.

Education

47.7% of the cases were high school level.

34.4% of the cases were elementary school level as shown in table 2.

In occupation,

70.6% of the cases were laborers.

For Marital status,

The cases were composed of 148 (82.2%) singles, 19 married individuals, and 13 divorced persons.

Characteristics of addiction

↑ Type of addiction: 165 cases (91.1%) were IV heroin addicts, 13 were volatile substance abusers (7.2%), and 2 cases (1.7%) were alcoholics.

↑ Average duration of addiction: 12.3 ± 5.9 years.

Treatment history and duration of treatment in TC program

↑ The average times they came for detoxification were 5.6 ± 4.5 times and average duration of treatment in the TC were 28.6 ± 7.2 months as shown in table 3.

I.Q. and Personality profiles

For 189 completed TC cases, only 156 I.Q. test and personality data records were found for analyzing.

Table 1. Geographic distribution.

Part of Thailand	Abstinent cases	Relapse cases	Total
1. Bangkok	72	27	99
2. Central	29	14	43
3. North	12	4	16
4. South	9	5	14
5. North-eastern	6	2	8
Total	128	52	180

Table 2. Education.

Level of Education	Abstinent cases	Relapse cases	Total
1. No formal education	0	1	1
2. Elementary school	40	22	62
3. High school	63	23	86
4. Polytechniques school	23	6	29
5. University	2	0	2
Total	128	52	180

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

	Abstinent cases	Relapse cases
average times of detoxification (times)	5.4 ± 4.4	6.2 ± 4.8
average duration in the TC (months)	29.5 ± 7.6	26.6 ± 5.8

The average I.Q. was 97.2 ± 10.9 . Relapse cases were of a neurotic introversion trend personality,

Table 4 . I.Q. and Personality profile.

Type of assessment	Abstinent cases (111 cases)	Relapse cases (45 cases)
I.Q.	97.4 ± 11.2	96.9 ± 10.4
MPI		
Neuroticism-Stability (N)	25.0 ± 9.8	26.8 ± 10.6
Extroversion-Introversion (E)	26.0 ± 7.5	23.5 ± 6.9
PICS		
Self Esteem (ES)	3.4 ± 1.9	3.5 ± 2.2
Low	2	1
Normal	89	36
High	20	8
Emotional Deprivation (ED)	3.4 ± 1.3	3.5 ± 1.4
Low	30	11
Normal	53	23
High	28	11
Social Maladaptation (SM)	3.1 ± 1.4	3.5 ± 1.4
Low	12	1
Normal	58	24
High	41	20
Impulse Control (IM)	3.9 ± 1.5	4.0 ± 1.5
Low	7	1
Normal	35	16
High	69	28
Hypersensitivity (HP)*	3.7 ± 1.5	3.4 ± 1.9
Low	27	16
Normal	77	20
High	7	9
Acceptability for Psychotherapy (AP)	23.1 ± 3.7	23.9 ± 3.8
Low	21	5
Normal	78	31
High	12	9
Psychopathic Deviate Scale (PD)	24.0 ± 4.7	24.1 ± 5.4
Low	32	16
Normal	68	24
High	11	5

* $\chi^2 = 10.5$; $p = 0.005$

Life profile of the patients during the after-care stage :

Of the patients 114 had stable, secure jobs during the after-care stage, and 38 cases became ex-addict staff in Thanyarak and other TC's in Thailand. Twelve cases were sent aboard to train TC techniques (3 to Sweden, 6 Italy and 4 to the USA)

The details are as described below.

1. Ex-addict staff		
Thanyarak TC	32	cases
Other TC in Thailand	6	cases
2. Government personnel	7	cases
3. NGO personnel	3	cases
4. Clerk in private company	7	cases
5. Salesman	6	cases
6. Metal-worker, Electrician, Plumber, Cable-worker	12	cases
7. Drivers	7	cases
8. Farmer, Gardener	4	cases
9. Security guard	3	cases
10. Buddhist Monk	3	cases
11. Other	19	cases

Discussion

The results of this study showed that the Thanyarak TC efficiency was impressive when compared with other TC⁽¹¹⁾ as 70.9% of the cases were free from drugs after the TC program. Only 29.1% of the cases relapsed, and this was mostly due to their previous environment and personality problems.

In this study, 180 cases were compared with the 1993 country addiction data⁽¹²⁾ of 82,620 cases. The comparison found no difference ($p > 0.05$) in sex, and type of addiction. There were however, significant differences in marital status and education ($p < 0.01$)

as 82.2% of the cases were single which was higher than the country addicts (54.2%) in 1993. The reason that almost all of the patients in the TC were single may be due to the convenience and with no family burdens it is easier to stay in the long TC program. There were 65.0% of the cases with above elementary school level education. Their education was higher than the country addicts (52.3%) in 1993. This higher education make them more amenable to the modern TC treatment methods.

Most of the cases lived in Bangkok and the central part of Thailand (78.9%) due to the location of the Thanyarak TC being near Bangkok.

The average duration of addiction of the patients was 12.3 ± 5.9 years. Those who were addicts for less than 5 years did not join the TC program. This was the fact that the longer they were addicts the more insight they had that the conventional programs could not prevent relapse.

Among the 180 cases, the abstinent cases (128) and relapse cases (52) were compared. The results showed no difference ($p > 0.05$) in sex, geographic distribution, occupation, education, type and duration of addiction, I.Q. test and duration in TC program. Another study showed a difference in many factors,⁽¹³⁾ especially the length of stay in the TC program.⁽¹⁴⁾ There was a significant difference ($p < 0.05$) in personality between these two groups. The abstinent cases were of an extroversion personality (26.8 ± 10.6). The relapse cases were of a neurotic-introversion personality (23.5 ± 6.9). This meant the extroversion personality was a good prognostic factor and the neurotic-introversion personality 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, we found the relapse cases had both abnormal low and high scores in Hypersensitive Character. This meant the relapse cases were liable to moods, some harmed others, some trusted others too much, and so they were easily stimulated to go back using drugs.

Although the TC program was significant time and resource consuming measures, the results of the treatment was much more effective than any other treatment. From the 5 year follow -up in the after-care stage, the drug-free group was 70.9%. The Thanyarak TC program is an effective treatment in Thailand because it uses much Thai culture style and it would be beneficial to expend this program in order to rescue addicts who desperately need a drug-free life.

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