

FAST Model: The evolution of rehabilitation for substance abuse treatment in Thailand

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Abstract

Thanyarak Institute, under Thailand's Department of Medical Services (DMS), Ministry of Public Health (MOPH), adopted the drug addiction treatment modality referred to as; Therapeutic Community Model (TC) from Sweden, with full support of the United Swedish Foundation of Sweden (UNISWED). TC utilization was originally initiated primarily for heroin and alcohol dependence, which Thanyarak Institute successfully applied for the first several years following adoption. However, over time the drug use problem in Thailand has changed in regards to substances of abuse, with more than half of all in-patient clients at Thanyarak Institute admitted were using powerful methamphetamines, which carry the street name of "Yaba". Concurrently, the drug abuser profile changed to include younger drug abusers, many in their teenage years. Therefore, Thanyarak Institute had to develop the TC model into the FAST model, to include younger methamphetamine drug abusers. Meanwhile, the MATRIX program defined below, which is similar to FAST, was also adopted in Thailand. Included within MATRIX is the concept of brain addiction which must be considered. Importantly, the FAST model core program includes family participation, alternative treatment activities, client support within self-help groups and a shortened time of treatment to 16 weeks. After more than ten years of using the FAST Model at Thanyarak Institute, and notably in other treatment centers in Thailand, the result of rehabilitation was more effective when comparing with the original Thailand TC. When clients completed the full course of the FAST Model, during follow-up after one year, the drug abstinence rate observed was more than 95%. FAST Model, however, is less suitable for the clients having chronic addiction disease and resulting brain addiction

destruction. The present challenge is to continue development of appropriate rehabilitation treatment programs which include after-care programs, for drug abusers, to help prevent their remission and to allow for long-term abstinence from drug abuse.

Key words : FAST Model, substance abuse treatment and rehabilitation

FAST Model the evolution of rehabilitation for substance addicts in Thailand.

As we initially experienced, the Therapeutic Community Model, or TC, was a treatment program applied inside rehabilitation center settings, and designed for drug addicts who were primarily heroin and alcohol dependent. Hundreds of countries worldwide historically provided TC, although the program names vary, and allow details to suit their cultures. In the year 1990, Thanyarak Institute adopted TC from Sweden, as mentioned above, with full support from the United Swedish Foundation of Sweden (UNISWED). Our adapted model became widely known as the “Thanyarak Therapeutic Community” running under the Department of Medical Services (DMS), Ministry of Public Health (MOPH). Our TC was the first and only successful program for addiction treatment in the world which is operated by Government Organization, at that time.¹

For past two decades in Thailand major changes occurred regarding the drug situation, as follows;

1. The main drug of abuse was methamphetamine, or “Yaba” (more than 70% of all over the country).

2. Most of the methamphetamine abusers were young (more than 50% were in 15-29 years of age), were unemployed (more than 50%) and had low-education levels (more than 50% were secondary level and more than 25% were primary level).

3. The number of abusers increased rapidly. (The volume of abuser is high up to 1.2 million cases in the year 2011 or 19:1000 of the total population).

4. Most of the patients are diagnosed as drug abusers, noting that addiction diagnosis formerly was applied to heroine and alcohol addicts. Nevertheless, drug abusers developed chemical dependence, although immediate physical withdrawal of methamphetamine is usually not as serious as heroine detoxification. However, brain effects from methamphetamine use have been observed as long lasting after withdrawal of the chemical intake. The major problems, which can be considered

a looming crisis, is concern and worry from the general population, medical professionals and Government authorities regarding methamphetamine abuse and brain addiction issues. Going forward, it is strongly recommended that Thailand's National agenda address the mental health aspects and disorders, such as psychosis, depressions and anxiety disorders, occurring in drug abusers, regardless whether there is a diagnosis of drug addict or drug abuser, as their brains are detrimentally effected both in function and structure.

5. The concept of 'brain addiction' and the 'MATRIX' out-patient treatment program, was developed, by the University of California, Los Angeles (UCLA), located in the USA. Worldwide utilization was implemented for treatment of stimulant abusers. Thanyarak MATRIX program required adaptation for treatment of methamphetamine abusers to include an intensive four (4) month out-patient program in Thailand in the year 2000.

Thanyarak Institute, in treatment of drug abusers and drug addicts, first applied our TC model which evolved into our FAST model. Additionally useful approaches of MATRIX² are included to address the described National drug situation as follows;

1. Family interventions: Interventions

are very important, because most of the clients are young and their families are worry so much about their children, while at the same time the problems in the families play important roles for the drug abusers. Family education of drug abuse, family therapy and family counseling are needed and conducted to help as holistic treatment and care³.

2. Alternative activities treatment: Because the clients are young and most often uneducated many of them cannot do even simple daily duties or perform tasks. It is necessary to provide vocational therapy, which we divide into two (2) categories: the first category allows practice of the beneficial things that they want to do, which may be playing sports, or doing simple works to raise their potential and self-esteem. For the others we train them in many kinds of jobs for which they can use to earn a living and take care of themselves with a career after they complete the treatment program³.

3. Self-help groups: Includes a peer group whereby clients participate and express themselves by sharing their thoughts, ideas and feelings. Somewhat like looking in the mirror seeing a reflection of them. In self-help groups when one says something out-loud, it is listened to emphatically by the group. The client learns from the

responses of the group, and the peer group who listens also learns from others who have similar issues.

4. Therapeutic community: Still being the core modality of drug abuse and addiction rehabilitation, we use the structure of TC as morning program, including group activities during the day, and all tools of rehab centers. We have shortened treatment time from years to four (4) months in most cases. More time is necessary in some cases due to mental

health, or brain chemical injury, supportive of the theory of brain addiction. Consideration in treatment must include cognitive functioning of the brain until strong enough to control behavior, which usually takes about four (4) months of time. Accordingly, we renamed the Thanyarak TC as our FAST Model (F refers to Family, A refers to Alternative activities treatment, S refers to Self-help and T refers to Therapeutic community).³

Table 1 Demographic information of addiction clients, comparing between fiscal year 1993-1997 and 2007-2011

Demographic information	Percentage of clients in TC Program					Percentage of clients in FAST Model				
	during year 1993-1997					during year 2007-2011				
	Fiscal year					Fiscal year				
	1993	1994	1995	1996	1997	2007	2008	2009	2010	2011
Gender										
Male	10,632 (96.7)	9,738 (94.6)	9,999 (93.8)	7,810 (92.9)	5,805 (92.1)	3,167 (78.5)	3,175 (77.7)	2,963 (76.2)	3,201 (78.1)	3,306 (81.1)
Female	473 (3.7)	551 (5.4)	662 (6.2)	599 (7.1)	502 (7.9)	869 (21.5)	913 (22.3)	917 (23.8)	896 (21.9)	775 (18.9)
Age										
0 – 14 years	39 (0.4)	60 (0.6)	86 (0.8)	87 (1.0)	147 (2.3)	37 (0.9)	45 (1.1)	66 (1.7)	62 (1.5)	81 (1.9)
15 – 19 years	1,108 (10.0)	1,688 (16.4)	2,416 (22.7)	2,020 (24.0)	1,679 (26.6)	570 (14.1)	691 (16.9)	608 (15.8)	694 (16.9)	680 (16.7)
20 – 24 years	2,329 (20.9)	2,490 (24.2)	2,807 (26.3)	2,247 (26.7)	1,706 (27.1)	900 (22.3)	832 (20.4)	708 (18.4)	712 (17.4)	724 (17.7)

Table 1 Demographic information of addiction clients, comparing between fiscal year 1993-1997 and 2007-2011 (Continued)

Demographic information	Percentage of clients in TC Program during year 1993-1997					Percentage of clients in FAST Model during year 2007-2011				
	1993	1994	1995	1996	1997	2007	2008	2009	2010	2011
Age										
25 – 29 years	2,226 (20.1)	1,963 (19.1)	1,850 (17.4)	1,435 (17.0)	953 (15.1)	884 (21.9)	878 (20.5)	788 (20.5)	769 (18.8)	730 (17.9)
30 – 34 years	1,701 (15.3)	1,672 (16.3)	1,403 (13.3)	1,022 (12.2)	602 (9.5)	517 (12.8)	611 (14.9)	612 (15.9)	722 (17.6)	709 (17.4)
35 – 39 years	689 (6.2)	1,322 (12.9)	1,076 (10.1)	807 (9.6)	551 (8.7)	346 (8.6)	346 (8.5)	356 (9.3)	399 (9.7)	408 (10.0)
40 – 44 years	250 (2.3)	647 (6.3)	560 (5.3)	407 (4.5)	294 (4.7)	286 (7.1)	242 (5.9)	286 (7.4)	241 (5.9)	258 (6.3)
45 – 49 years	111 (1.0)	191 (1.9)	213 (2.0)	181 (2.2)	203 (3.2)	205 (5.1)	200 (4.9)	189 (4.9)	196 (4.8)	183 (4.5)
50 – 54 years	85 (0.8)	113 (1.1)	131 (1.2)	109 (1.3)	71 (1.1)	139 (3.4)	124 (3.0)	132 (3.4)	164 (4.0)	152 (3.7)
55 – 59 years	53 (0.5)	75 (0.7)	57 (0.5)	53 (0.6)	46 (0.7)	90 (2.2)	66 (1.6)	57 (1.5)	85 (2.1)	82 (2.0)
60 years and older	43 (0.4)	68 (0.7)	62 (0.6)	41 (0.5)	55 (0.9)	62 (1.5)	53 (1.3)	50 (1.3)	53 (1.3)	74 (1.8)
Education level										
Primary	6,542 (58.9)	4,473 (43.5)	4,113 (38.6)	2,984 (35.5)	2,036 (38.3)	1,672 (41.4)	1,528 (37.4)	1,343 (34.9)	1,268 (30.1)	1,135 (27.8)
Secondary	3,420 (30.1)	4,118 (40.0)	4,685 (44.0)	3,903 (46.4)	3,035 (48.1)	1,815 (44.9)	2,092 (51.2)	1,990 (51.7)	2,253 (54.9)	2,250 (55.1)

Table 1 Demographic information of addiction clients, comparing between fiscal year 1993-1997 and 2007-2011 (Continued)

Demographic information	Percentage of clients in TC Program					Percentage of clients in FAST Model				
	during year 1993-1997					during year 2007-2011				
	Fiscal year	Fiscal year	Fiscal year	Fiscal year	Fiscal year	Fiscal year	Fiscal year	Fiscal year	Fiscal year	Fiscal year
	1993	1994	1995	1996	1997	2007	2008	2009	2010	2011
Education level										
Vocational	512 (4.6)	1,487 (14.5)	1,618 (15.2)	1,297 (15.4)	1,066 (16.9)	406 (10.1)	322 (7.8)	336 (8.7)	342 (8.4)	398 (9.8)
Bachelor	354 (3.2)	49 (0.5)	112 (1.1)	94 (1.1)	86 (1.4)	139 (3.4)	141 (3.5)	183 (4.8)	233 (5.7)	295 (7.2)
Others	277 (2.5)	162 (1.6)	133 (1.3)	131 (1.6)	84 (1.3)	4 (0.1)	5 (0.1)	1 (0.01)	1 (0.02)	3 (0.1)
Occupation										
Unemployment	1,902 (17.1)	2,502 (24.3)	3,575 (33.5)	3,335 (39.7)	2,702 (42.8)	1,606 (39.8)	2,225 (54.4)	1,878 (48.7)	2,269 (55.4)	2,234 (54.7)
Labor	6,436 (57.9)	5,393 (52.4)	4,605 (43.2)	3,376 (40.2)	2,073 (32.9)	1,122 (27.8)	460 (11.2)	829 (21.5)	776 (18.9)	697 (17.1)
Merchants	1,536 (13.8)	1,280 (12.4)	1,197 (11.2)	852 (10.1)	667 (10.6)	442 (10.9)	438 (10.7)	386 (10.0)	296 (7.2)	282 (6.9)
Pupil-Student	289 (2.6)	395 (3.8)	592 (5.6)	336 (4.0)	507 (8.0)	48 (1.2)	44 (1.1)	99 (2.6)	163 (4.0)	206 (5.1)
Government employee	91 (0.8)	124 (1.2)	175 (1.6)	183 (2.2)	135 (2.1)	147 (3.6)	112 (2.7)	138 (3.6)	129 (3.2)	133 (3.3)
Agriculture	237 (0.5)	502 (4.8)	543 (4.3)	281 (3.3)	210 (3.3)	101 (2.5)	51 (1.3)	110 (2.9)	99 (2.4)	124 (3.0)
Others	555 (5.0)	43 (0.4)	29 (0.3)	22 (0.3)	8 (0.1)	570 (14.1)	758 (18.5)	413 (10.7)	363 (8.9)	405 (9.9)

Table 1 Demographic information of addiction clients, comparing between fiscal year 1993-1997 and 2007-2011 (Continued)

Demographic information	Percentage of clients in TC Program during year 1993-1997 Fiscal year					Percentage of clients in FAST Model during year 2007-2011 Fiscal year				
	1993	1994	1995	1996	1997	2007	2008	2009	2010	2011
Type of drug abuse										
Heroin	10,267 (92.5)	9,458 (91.9)	9,656 (90.6)	6,779 (80.6)	3,330 (52.8)	52 (1.3)	56 (1.4)	46 (1.2)	48 (1.2)	37 (0.9)
Opium	87 (0.8)	64 (0.6)	71 (0.7)	78 (0.9)	82 (1.3)	7 (0.2)	5 (0.1)	3 (0.1)	6 (0.2)	5 (0.1)
Cannabis	58 (0.5)	52 (0.5)	67 (0.6)	43 (0.5)	72 (1.1)	127 (3.2)	68 (2.1)	80 (2.0)	137 (3.3)	154 (3.8)
Methamphetamine "YABA"	44 (0.4)	88 (0.9)	208 (2.0)	865 (10.3)	1,992 (31.6)	2,579 (63.6)	2,815 (68.9)	2,410 (62.6)	2,456 (60.0)	2,256 (55.3)
Alcohol	338 (3.0)	368 (3.6)	393 (3.7)	434 (5.2)	537 (8.5)	1,046 (25.9)	924 (22.6)	1,047 (27.2)	1,037 (25.3)	1,044 (25.6)
Inhalant	300 (2.7)	239 (2.3)	235 (2.2)	195 (2.3)	262 (4.2)	93 (2.3)	87 (2.1)	155 (4.0)	163 (4.0)	106 (2.6)
Methamphetamine "Ice"	-	-	-	-	-	-	54 (1.3)	53 (1.4)	183 (4.5)	412 (10.1)
Others	11 (0.1)	20 (0.2)	31 (0.3)	15 (0.2)	49 (0.5)	123 (3.0)	59 (1.4)	59 (1.5)	57 (1.6)	65 (1.6)

Table 1 Demographic information of addiction clients, comparing between fiscal year 1993-1997 and 2007-2011 (Continued)

Demographic information	Percentage of clients in TC Program					Percentage of clients in FAST Model				
	during year 1993-1997					during year 2007-2011				
	1993	1994	1995	1996	1997	2007	2008	2009	2010	2011
Route of administration										
Injection	8,339 (75.1)	7,337 (71.3)	7,842 (73.6)	5,654 (67.2)	3,094 (49.1)	72 (1.8)	60 (1.5)	52 (1.4)	65 (1.6)	49 (1.2)
Oral	399 (3.6)	427 (4.2)	468 (4.4)	504 (4.4)	624 (9.9)	1,097 (27.2)	967 (23.7)	1,092 (28.3)	1,094 (26.7)	1,091 (26.7)
Smoke	2,065 (18.6)	2,285 (22.2)	2,125 (19.9)	2,051 (24.4)	2,330 (36.9)	2,763 (68.5)	2,968 (72.6)	2,551 (66.2)	2,773 (67.8)	2,834 (69.4)
Inhale	302 (2.7)	240 (2.3)	226 (2.1)	200 (2.4)	259 (4.1)	100 (2.5)	89 (2.2)	154 (4.0)	165 (4.0)	105 (2.6)
Others	-	-	-	-	-	4 (0.1)	4 (0.1)	4 (0.1)	-	2 (0.1)

**statistic collecting data from IT section of Thanyarak Institute*

To compare the result after we have applied the FAST Model (about the year of the 2000) we found that in the past for TC, after clients stayed in full program they were discharged and followed up for

one (1) year, it is noted only 7-10 % could quit the drug completely. That was quite different from FAST Model which has the high abstinent rate up to 95%

Table 2 Result of treatment

Result of treatment	Percentage of clients in TC Program			Percentage of clients in FAST Model		
	during year 1998-2000		Fiscal year	during year 2009-2011		Fiscal year
	1998	1999	2000	2009	2010	2011
-Full course of treatment	4,042	3,451	3,187	1,377	1,693	4,171
- Full course of 1 year follow up	572 (14.2)	553 (16.1)	891 (27.9)	299 (21.7)	516 (30.5)	1,348 (47.3)
- Abstinent in 1 year follow up	49 (8.6)	59 (10.7)	64 (7.2)	282 (94.3)	490 (94.9)	1,291 (95.8)

**statistic collecting data from IT section of Thanyarak Institute*

After we developed FAST model, in the year of 2001, the law of compulsory treatment was in force for the drug abusers who were arrested by the police. The numbers of clients increase rapidly; even though we have six (6) branches of drug addict treatment centers (Thanyarak Institute and these 6 branches have a combined capacity for clients about 1,700 beds). FAST Model was transferred to be the model of rehabilitation for the Ministry of Public Health and non-ministry of public health service centers over the country, such as in military settings and Temple settings, and was well recognized as the best model for rehabilitation for clients. There are about 15,000-20,000 clients rehabilitated by FAST Model each year.

But the threatened conditions presently, and foreseeable in the future, are co-morbidities of mental disorders, such as psychosis, depression, and cognitive impairments caused by the brain destruction of chronic drug abusers. These conditions have increased each year, and more clients need rehabilitation following detoxification. However, there no present treatment model that appropriates for them. Today we have set-up one rehabilitation center where co-morbidly cases are separated from the others. We appropriately call it 'Cognitive Impairment Rehabilitation building'. The programs of FAST Model are the same as the others, TC is still the core, but not in full scale, while on the other hand we try to enhance their brain,

promote their potential by using many tools, and hope that if we can find success in a way to help them. We may devise another name of a rehabilitation model, in the future, but however TC is still considered the core concept of rehabilitation eventually^{4,5}.

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