

# A Prospective Study of Effectiveness of Pre-release Intensive Program for Prisoners in Thailand

Wanna Pajumpa<sup>1</sup>, Manop Kanato<sup>2</sup>, Kittima Momen<sup>3</sup>

<sup>1</sup>Student of Doctoral of Community Health Development Program, Faculty of Medicine, Khon Kaen University,

<sup>2</sup>Associate Professor, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand,

<sup>3</sup>Official, Department of Corrections, Bangkok-11000, Thailand

## Abstract

**Background:** The intensive program for pre-release prisoners has been developed in Thai Correctional System with a prospective cohort study design on the effectiveness of treatment program before releasing prisoners. The samples were 850 prisoners who were drug users. The aim of this was to compare the effectiveness of the pre-release intensive program on the intensive group with the normal group of prisoners in the correctional system.

**Method:** Data were collected by using questionnaires and interview which were conducted in the areas under Department of Corrections, Thailand. Inference statistics were used for the analysis in this research.

**Results:** Firstly, it was found that the prisoners who received the intensive Program improved their criminal rate with Hazard Ratio = 0.294 (95%CI, 0.136-0.632) (p-value < 0.05), and the intensive program was applied in group activities to solve the problem of prisoners. Secondly, based on the analysis using Generalized Estimating Equations (GEE) to estimate the distance from criminal rate, it was found that there were no differences among the prisoners who entered the treatment program in the intensive group and the control group that have been released on time with statistical significance (p-value < 0.05).

**Conclusions:** Our findings indicated that the intensive program was effective for pre-release prisoners who are drug users from the Correctional. The duration of the implementation of the program was 4 months and the behavior of the prisoners must be observed constantly.

**Keywords:** Pre-release Intensive Program, Prisoners, Drug Users.

## Introduction

UNODC (United Nation Office on Drug and Crime) reveals the epidemic trend of addictive substance, which was shown by comparative analysis of information of asset in dispute in 2017 that more than 271 million people or 5.5 percent of the population aged 15-64 years

old used to consume one kind of addictive substance. According to World Drugs Report, we found that most popular drugs were Marijuana, Opium, Cocaine and Amphetamine-Type Stimulants (ATS), which have been spreading in many continents.<sup>1</sup> Continuous Household Survey in estimating addictive substance users within the same period of time in Thailand found that Thai people aged 12-65 years old used to consume one kind of addictive substance approximately for 3.50 million people or 58.2 people per 1,000 people. Moreover, 1,425,342 people used to consume one kind of addictive substance within 1 year.<sup>2</sup> The number of drug users has been increasing accordingly to the increase of treatment rate. The ratio of male and female patients was 90% and 10%, respectively, and there were new patients than current patients about 80%.<sup>3</sup>

---

### Corresponding Author:

**Manop Kanato, Ph.D.**

Associate Professor, Department of Community Medicine, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand

e-mail: manopkanato@gmail.com

Phone: +6668-032-3330

Overcrowding in prisons causes many problems such as handling problem, behavior reforming and offence repetition. Updated convict statistic reveals that prisoners with offence against narcotics are the highest proportion in the prison compared to other kinds of prisoners. In addition, more than 50% of them will make the same mistake within the first 3 years.<sup>4,5</sup>

At present, Therapeutic Community (T.C.), which is called "CARE Model" (C=Corrections, A=Addiction, RE=Rehabilitation), has been used for the patients in prisons since 1994 by using knowledge and experiences from Communita in Control Organization (Italy) and Day Top Organization (USA) to adapt and properly apply with the prison's condition, discipline and Thais culture to reform prisoners' attitude, emotion and behavior. The treatment has been widely used in 85 prisons all around Thailand. However, the limit of prison workability, caused by outnumbered prisoners, causes the treatment area unable to be specifically separated up to each type of patients and the patients who have completed the treatment still need to live with other prisoners. As a result, most prisoners do not have enough motivation for drug stoppage and behavior reforming.<sup>6, 7, 8</sup>

The indicator for successful performance and advantage of the treatment has been still vague in quantity and effectiveness for accessibility, harm reduction of drug addict, preparation result before freeing the patient who does not need to be captured in the prison. There are many arguments about performance, worthiness, effect on society, economy, crime, drug users and implementation of concrete procedures for reducing society's fear and congestion inside the prison.<sup>9</sup> An additional study on wellness of mental health of the drug users in terms of recognition, increasing of positive thinking in themselves and life's goal reveals that the drug users stops addicting to drugs and satisfy with their lives and have more self-esteem. So, they are ready to face with daily life's problems and understand how to solve the problems by themselves without using the drugs.<sup>10, 11</sup>

The researcher had an idea to develop the new intensive treatment program for prisoners who could be freed prior to the schedule. This new program contains 2 main components: 1) solving and development procedures that make prisoners can solve their addictive drugs problem in an uncertain circumstance and 2) reinforcing all physical & mental health, emotion, social of the prisoners, mainly focusing on the development

of mental health until they can normally live with the society and will not go back to the addiction circle and crime. It is the study to assess the effectiveness of the intensive program for preparing the prisoners who have been captured by offence against narcotics before they are in the Parole process of Department of Corrections. The mentioned program was developed by the researcher who had compared the overall result between normal prisoners and pre-release prisoners. The results will be beneficial for Department of Corrections, Department of Probation, Office of the Narcotics Control Board, Royal Thai Police and Department of Public Health for the remedy of the prisoners with efficient and practical process.

## Material and Method

**Study Design:** This research was a prospective cohort study design to compare effectiveness of intensive program and the normal program which can lead to the fact. Data were analyzed by analytical statistics method.

**Population and Sample:** The population and sample in this study were from 12 areas in Department of Corrections, which all of type in Thai Correctional were accept into this study.

**Subjects Recruitment:** A sample of 850 prisoners was recruited from the correctional in Thailand, applying a criterion based selection method as a group of drug prisoners, were selected by the purposive random sampling. According to the selection criteria, about 32,000 people were sent to Department of Corrections for the selection of male-female prisoners. The samples must have a history of drug abuse alone with no other offenses. The sample size was calculated based on Cohen (1992)<sup>12</sup>: the effect size and the confidence level were at 0.05, so the sample size was 2,900 people, who were 850 expected to volunteer to participate in the project.

**Experimental Procedures:** The intensive program consisted of treatment and rehabilitation procedure for pre-release drug users in prisons. The duration of program was 4 months. It consisted of 4 activities as follows: 1) development of the spiritual condition with religion, 2) development of the behavioral therapy, 3) relapse prevention skill and 4) development of living management skill. The effectiveness of pre-release intensive program was compared during the process of data collection at baseline, and after the release at 3, 6, 9, 12 months.

**Measurement and Instrument:** A structured questionnaire was developed based on literature reviews in response to the research questions. The questionnaire consisted of 2 parts: Part 1: Participants’ characteristics and Part 2: Distance from Criminal Scale. It was applied for interviews to achieve the research objectives. The context in prison, Department of Corrections/ Correctional Institution for drug users which affected to the effectiveness of pre-release intensive program must be considered. In addition, Content Validity Index (CVI) was 0.98 which passed the quality control of the research instrument. The instrument had high level of reliability with Cronbach’s alpha of 0.70, 0.93.

**Data Collection:** Data were collected from July 2016 to April 2018. The interviews with the participants in operational research were focusing on the content of the intensive program, follow-up results and effectiveness of the program as the context of operational processes.

**Statistical Analysis:** Research information made the table analysis for data clustering. The assessment of reliability (credibility) was also considered in this research. Data double entry was used to construct the research database. Data exploration was done to correct the out of range, outliers, and missing value problems. Percentage, mean and standard deviation and inferential statistics, including Chi-square and Survival time to

criminal event by Hazard ratio (95%CI), Generalized Estimating Equations (GEE) were employed.

**Result**

The participants’ characteristics were shown in Table 1. Among 850 respondents who volunteered in this study, there were 100% of male in the intensive group and 93.25% of male and 6.75% of female in the control group. The mean age of the intensive group was 30.24 years (SD = 7.19) and that of the control group was 32.28 years (SD = 9.23). The mean family income was 24,128.81 baht (ranging 6,000-200,000 baht). Chi-square tests demonstrated the differences in gender, marital status, occupation and relationship in the family.

The comparison of time to criminal event was presented in Table 2. The hazard ratio among the prisoners who were released within the group was 0.294(0.136, 0.632), p-value < 0.05. Among 850 drug users, age, marital status, relationship in the family, and substance currently in use were found to be associated with the program for pre-release.

The effectiveness of the intensive program for pre-release offenders in Thailand was presented in Table 3. The Generalized Estimating Equation of the intensive group was (GEE) 0.054 (-0.000 to 0.100), p-value < 0.05.

**Table 1: Characteristics of participants from baseline interview in each group (self-report)(n=850)**

Participants’ Characteristics	Intensive Group Number (%)	Control Group Number (%)	p-value
<b>1. Gender</b>			<b>0.000*</b>
• Male	427(100)	359(93.25)	
• Female	0(0)	26(6.75)	
<b>2. Age</b>			<b>0.000*</b>
• Minimum	17	19	
• Maximum	60	70	
• Mean; S.D.	30.24; 7.19	32.28; 9.23	
<b>3. Marital status</b>			<b>0.009*</b>
• Single/Widowed/Divorced/Separated	274(64.17)	280(72.73)	
• Couple	153(35.83)	105(27.27)	
<b>4. Income (Baht)</b>			<b>0.000*</b>
• Minimum	5,000	3,500	
• Maximum	30,000	80,000	
• Mean; S.D.	10,950.82; 2,582.20	9,846.75; 5,308.32	
<b>5. Family Income (Baht)</b>			<b>0.000*</b>
• Minimum	6,000	5,000	
• Maximum	200,000	100,000	
• Mean; S.D.	24,128.81; 14,396.91	19,654.55; 12,554.99	

\* p-value < 0.05

**Table 2: Comparison of Time to Criminal Event (n=850)**

Variable	Time to Criminal Event	
	Hazard Ratio (95% CI)	p-value
1. Group	0.294(0.136-0.632)	0.002*
2. Gender	1.640(0.384-7.010)	0.504
3. Marital status	1.393(0.704-2.756)	0.341
4. Habitat	0.917(0.422-1.994)	0.828
5. Relationship in the Family	1.612(0.379-6.847)	0.518
6. Substance Currently in Use	0.980(0.546-1.758)	0.945

\* p-value < 0.05.

**Table 3: Description and comparison of Distance from Criminal Scale variables between the intensive group and the control group at baseline, 3<sup>rd</sup> month, 6<sup>th</sup> month, 9<sup>th</sup> month and 12<sup>th</sup> month by analysis of covariance and generalized estimating equations (GEE)**

Variable	Group	Baseline	Follow-up after the intensive program training				Overall
			3 <sup>rd</sup> month	6 <sup>th</sup> month	9 <sup>th</sup> month	12 <sup>th</sup> month	
Distance from Criminal Scale	Intensive	53.81±0.10	46.70±0.49	44.09±0.57	41.13±0.56	37.88±0.50	
	Control	53.89±0.11	48.79±0.44	45.34±0.54	30.10±0.10	30.41±0.88	
	Mean Difference	NA	-2.09	-1.25	11.02	7.47	-3.98
	95%CI	NA	-3.38 to -0.79	-2.79 to 0.29	9.88 to 12.16	6.45 to 8.49	-4.71 to -3.25
	p-value	NA	0.00	0.11	0.00	0.00	0.00

\*Mean difference (Intensive Program) was adjusted for baseline measurements and each visit using analysis of covariance (ANCOVA) and for overall generalized estimating equations was implemented under generalized linear model frameworks.

### Discussion

The intensive program was rehabilitation for drug users in the correctional system. It was a specific program which can classify drug users, drug addicts, and violent offenders or retailers' types. The definition of patient characteristics was also included in the program for prisoners who volunteered or were motivated to change behavior. The technique which was focus-group of therapeutic community program for prisoners can help them to develop themselves to live well in society, which can affect the increase of program efficiency. The prisoners have known their self-worth after being treated with the Intensive Program.<sup>13</sup>

The impunity was one of all measures which can reduce the number of prisoners and the congestion in prisons, save the budget for the prisoners and control them easier according to the Royal Commission on Corrections, 1936, Section 32(5). The prisoners with good behavior endeavor in studying and good effectiveness in working or doing the favor for government officers are considered to get the opportunity to leave the prison and live with family and society before the penalty sentence under the strictly defined conditions. The community

also has the opportunity to participate in solving, treating, and modifying the behavior and attitudes of the prisoners so that they are ready to behave as a good citizen and able to work honestly and live well with others after being impunity without returning to commit the same mistake again. Reducing the number of prisoners and overcrowding in prisons can save budget for prisoners and the control of prisoners to a certain extent.<sup>14, 15</sup>

A study on the effectiveness assessment of the program and rehabilitation of drug users has been working effectively during the preparation time before prisoner's release. The assessment must be continually done while the prisoners were in the correctional system.<sup>16,17,18</sup> After the prisoners were sentenced as being impunity, they must be followed up to assess their behavior while living in a community. It must be associated with the integrated cooperation between government and community organizations.<sup>19, 20, 21</sup>

### Conclusion

The effectiveness of pre-release intensive program via correctional therapy can modify the behavior of the prisoners with the pattern of group process. The

focus-group process can help the members to express their feelings, emotion and self-confidence as well as to accept the other members' opinions. Therefore, the system of rehabilitation in Department of Corrections must include classification, screening for prisoners in many of drug cases to assess the severity of the problem who have developed habits, Department of Corrections have qualification to meet the criteria for suspension of special cases for pre-release Intensive Program could be released before 2 years after being released that would help drain prisoners and decreased budget of Department of Corrections about 280 million baht in a 2 year period, and also helps improve the quality of life for prisoners due to be released prematurely could live in society as usual.

**Acknowledgements:** The authors would like to thank Department of Corrections in Thailand for funding support for this research project. Grateful acknowledgment was made to the officers and the prisoners who were the samples for data collection and cooperation.

**Conflict of Interests:** The authors declare no conflicts of interest.

**Source of Funding:** Department of Corrections, Thailand.

**Ethics Statement:** The ethics statement of this study was conducted by the research team. At the stage of data gathering, verbal consent was required. Personal identifiers (names, full addresses) were stripped from the data set. This research project was approved by the Ethics Committee Khon Kaen University (HE591226) based on the principle of Declaration of Helsinki, and ICH GCP standards.

## References

1. United Nations Office on Drug and Crime. World Drug Report 2019. Vienna: Press 2019c.
2. Kanato M, et al. Report on Prediction of Substance Use in Thailand. Office of Narcotic Control Board 2016.
3. Office of Narcotic Control Board. National Household Survey on Substance Abuse 2016. Ministry of Justice 2016.
4. Wexler H K, and Fletcher B W. National Criminal Justice Drug Abuse Treatment Studies (CJ-DATS) Overview. *The Prison Journal* 2007; 87(1): 9-24.
5. Mariel, A., Matthew R. D. and Joshua M. Update on Prisoner Recidivism: A 9-Year Follow-up Period (2005-2014). U.S. Department of Justice 2018.
6. Thaigla K. Effect of Study about Format of Drugs Related Offenses by Prisoner. Office of Narcotic Control Board 2014.
7. Suriyamanee C K, et al. Factor Effect Recidivism Drug Cases: The Case Study of Serious Offenders with High Penalties and must be Viewed Specially (Research Report). Office of Narcotic Control Board and Faculty of Social Sciences and Humanities, Mahidol University 2010.
8. Brooks L E, et al. Re incarcerated: The Experiences of Men Returning to Massachusetts Prisons. Washington, DC: The Urban Institute 2008.
9. Kelly E C, Lara A R. Methamphetamine: An Update on Epidemiology, Pharmacology, Clinical Phenomenology, and Treatment Literature. *Drug and Alcohol Dependence* 2014; 143(1): 11-21.
10. Mathew R, Georgi J, Wilson W and Mathew V. A Retrospective Study of the Concept of Spirituality as Understood by Recovering Individuals. *Journal of Substance Abuse Treatment* 1996; 13(1): 67-73.
11. Abbas S, et al. Recovery Based on Spirituality in Substance Abusers in Iran. *Global Journal of Health Science* 2014; 6(6): 154-162.
12. Cohen, J. A Power Primer. *Psychological Bulletin* 1992; 112(1): 155.
13. Astrid B, Luke G. Establishing a Compulsory Drug Treatment Prison: Therapeutic Policy, Principles, and Practices in Addressing Offender Rights and Rehabilitation. *International Journal of Law and Psychiatry* 2010; 33: 341-349.
14. Kanato M. Leyatikul P. Thai Addiction Stigma Scale. *Community Health Development Quarterly* 2014; 2(2):1-18.
15. Behavior Development System Institute of Correction. Factors Affect to Recidivism. Bangkok: Bureau of Correctional System Research and Development 2013.
16. Hung-En Sung and Linda Richter. Contextual Barriers to Successful Reentry of Recovering Drug Offenders. *Journal of Substance Abuse Treatment*. 2006; 31: 365-374.
17. Kanato M, Nunun W, Momen K. Thailand Drug Policies. Khon Kaen: ISAN, 2010.
18. Obert JL, McCann MJ, Marinelli-Casey P, Weiner

- A, Minsky S, Brethen P. The Matrix Model of Outpatient Stimulant Abuse Treatment: History and Description. *Journal Psychoactive Drugs*. 2000; 32: 157-164.
19. Johnson, K. "Offenders Face Long Wait for Drug-Rehab Services". USA Today, USA 2012.
20. Karen H, Andrew D and R S. Prison-Based Correctional Rehabilitation: An Overview of Intensive Trends & Issues in Crime and Criminal Justice 2011; 412: 1-6.
21. Department of Corrections. Treatment of offenders. Ministry of Justice, Bangkok 2018. [Online] Available at: <[http://www.correct.go.th/?page\\_id=12252](http://www.correct.go.th/?page_id=12252)> [Accessed 12 February 2019].