



Narcotics Division, Security Bureau
The Government of the Hong Kong Special Administrative Region
of the People's Republic of China



A Study on the Recovery Process of Offenders with History of Drug Abuse: Challenges and Opportunities

Beat Drugs Fund Project No. 180060

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(A) Study Objectives



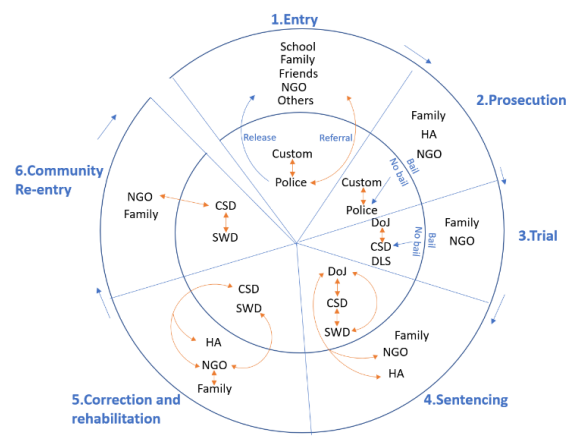
1. Examine the profiles and **characteristics of offenders** with drug abuse behavior;
2. Explore the **rehabilitation process** of the offenders with drug abuse behavior and identify **potential mechanisms to improve** rehabilitation outcomes;
3. Estimate the **potential reduction in social costs** relating to the potential improvements in the rehabilitation process.

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(B) The current drug treatment and rehabilitative system in Hong Kong



- It is assumed that incarceration and recovery is a linear process. Instead, it is a series of complex sub-systems with stakeholders **interactively impact one another**, that exist within **a more cyclical process** (*blue arrows*), especially in cases of recidivism.
- Stakeholders need to **communicate and coordinate activities in a complex manner** (*orange arrows*). The complex cyclical process reveals the dynamic and interdependent nature of the system, each stage featuring very different patterns.
- To avoid offenders going through the cycle multiple times, it is likely that **improvements will require a full recognition of these complex dynamics**.



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(C) The Treatment and Rehabilitation Support for Younger-age Drug Users in CSD: Effectiveness and Determinants



Research questions:

1. What is the effectiveness of the T&R support in CSD for younger-age drug abusers?
2. What factors influence the outcome of the T&R support in CSD for younger-age drug abusers?

Sample: The data set includes the data of DATC offenders aged from 15 to 30 at the time of admission from 2013 to 2019 (n=2031).

Measures: Recall rate, the sociodemographic profile of offenders

Data analysis: Latent class analysis, Cox proportional hazard models, Logistic regression

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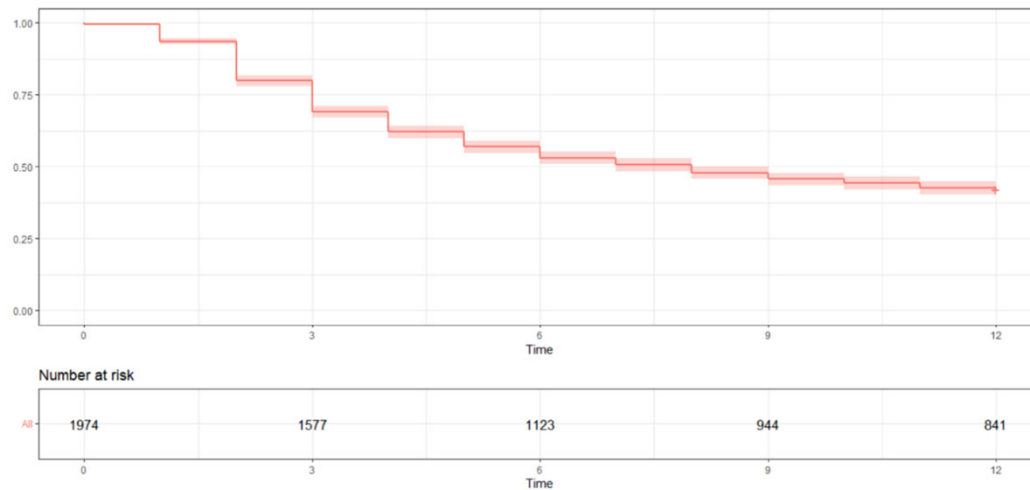
(C) Findings



- Approximately **58% of the DATC offenders were recalled** during the 12 months supervision period. Of those recalled, about **78% are recalled due to drug relapse**.
- The regression results suggest that **age, marital status, conviction history, attendance of rehabilitation programmes, and visitation during incarceration** are closely associated with recall and/or reoffending. In addition, having been recalled due to relapse is a predictor of drug-related reoffending.
- To highlight, we found that indicators of a **STRONG social support network (i.e., greater visitation from family and friends)** showed an association with reduced risk of recall. Offenders with more previous convictions were more likely to be recalled, indicative of stubborn patterns of drug offending.
- We found a **higher risk of recall for those who have attended more rehabilitation programmes**. While this seems counter-intuitive, it may be that the participants were at higher risk before attending the programme, and that these programmes could not fully negate this heightened risk.

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Figure 3.1 Recall probability within 12 months



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Table 3.5 Logistic regression and Cox regression on the likelihood of relapse during supervision period

	Logistic regression OR (95% CI)	Cox regression HR (95% CI)
Demographics		
Age group		
<i>Below 18</i>	Reference	Reference
<i>18-24</i>	3.74 (1.56-9.58) **	2.22 (1.14-4.34) *
<i>25-30</i>	2.70 (1.11-7.02) *	1.94 (0.99-3.82)
Gender (female as reference)	1.00 (0.71-1.41)	0.95 (0.78-1.15)
Biological		
Number of drugs in two years		
<i>0</i>	Reference	Reference
<i>1</i>	0.98 (0.45-2.09)	0.99 (0.64-1.53)
<i>2</i>	1.01 (0.44-2.27)	1.05 (0.66-1.67)
<i>>2</i>	0.78 (0.29-2.05)	0.84 (0.48-1.47)
Type of drug users		
<i>Ketamine-user</i>	Reference	Reference
<i>Cocaine-ketamine-ice user</i>	0.65 (0.24-1.77)	0.92 (0.52-1.64)
<i>Diverse user</i>	0.73 (0.49-1.10)	0.75 (0.60-0.95) *
<i>Ice-user</i>	0.78 (0.58-1.04)	0.87 (0.74-1.02)
Internal / psychological		
Attendance of rehabilitation programme		
<i>Substance abuse</i>	2.33 (1.61-3.37) ***	1.71 (1.34-2.17) ***
<i>Marital/family</i>	1.26 (0.93-1.72)	1.04 (0.88-1.23)
<i>Societal</i>	1.21 (0.90-1.65)	1.10 (0.93-1.30)
<i>Employment</i>	1.47 (1.05-2.06) *	1.31 (1.09-1.57) **
<i>Community functioning</i>	1.51 (1.02-2.24) *	1.25 (1.02-1.54) *
Social/environmental		
Number of visitations per year	0.91 (0.90-0.92) ***	0.94 (0.93-0.94) ***
Marital status		
<i>Single</i>	Reference	Reference
<i>Married/Co habiting</i>	1.65 (1.16-2.36) **	1.35 (1.12-1.61) **
<i>Separated/Divorced / Widowed</i>	1.14 (0.54-2.48)	1.15 (0.75-1.75)
Educational attainment		
<i>Primary or below</i>	Reference	Reference
<i>Secondary</i>	0.98 (0.52-1.81)	0.96 (0.68-1.35)
<i>Post-secondary</i>	0.87 (0.19-4.23)	1.04 (0.44-2.49)
Employment status		
<i>Employed</i>	Reference	Reference
<i>Unemployed</i>	0.98 (0.75-1.28)	0.99 (0.86-1.15)
<i>Economically inactive</i>	0.96 (0.40-2.32)	1.26 (0.76-2.09)
Number of convictions		
<i>0</i>	Reference	Reference
<i>1</i>	0.74 (0.55-1.00) **	0.86 (0.72-1.02)
<i>2-4</i>	1.16 (0.82-1.64)	1.18 (0.98-1.42)
<i>> 4</i>	1.86 (0.85-4.41)	1.69 (1.17-2.43) **

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(D) Interview-based Exploration of the Treatment and Rehabilitative Process



Research questions:

1. How is the drug treatment and rehabilitation system self-organized in Hong Kong?
2. To what extent does the existing drug treatment and rehabilitation system for offenders in Hong Kong exhibit signs of coordination (or fragmentation) and how might this be improved?

Study design: Systematic desktop research and semi-structured interviews

Participants: Interviewed 100 (ex-)offenders and 30 stakeholders from different NGOs

Data analysis: Thematic Analysis

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(D) Findings



- The positives include the **use of pre-existing resources** available from community stakeholders such as court outreach and duty lawyer schemes that aim to provide support to service users before trials. **Counselling and career mentoring at the correctional stage were also impactful.**
- In line with previous literature, the interviews also pointed to areas where services could be made more efficient through enhanced coordination between different stakeholders in the system.
 1. The first opportunity for improvement concerns **early intervention at prosecution and pre-trial** (i.e., referral mechanisms to connect arrestees to community resources earlier).
 2. The second theme pinpoints the importance of **good information in decision making at pre-sentencing**. The suggestions is setting up an updated legal protocol with key guidance from different disciplines in order to bring interdisciplinary expertise together.
 3. The last theme highlights opportunities for **enhancement in care and rehabilitative services** for offenders at the correctional and reintegration stage, such as through an expansion of services, service re-organization and strengthened coordination between different parties during the process of community re-integration.

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(E) Potential Reduction in Social Costs Related to Improvements in the Rehabilitation System



Conceptual deliberation

- Proposition: **There is room for improvement in the existing rehabilitation system** (including more visitation by family members, more coordination between CSD with other community parties, etc.)

Examining the quantity of the potential improvement

- Actions that address the service/policy gaps could potentially improve the rehabilitation process and the **improvement would eventually lead to a reduction in the recall rate.**
- Conceptual model of maximum reduction in recalls (→ *next page*)
 - The locally-relevant benchmark
 - Maximum reduction in recalls

Valuing the potential reduction in recalls in an economic term

- The valuation is based on a tangible cost approach. We estimate that the associated cost of each incidence of recall are based on two components:
 1. **Averted crime cost**
 2. **Loss of productivity cost**

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Figure 5.1 Conceptual model of maximum reduction in recalls



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(E) Findings



Table 5.1 Cost reduction estimation

Item	Unit costs (HK\$)	Unit cost (HK\$) adjusted to 2021 ¹²	Cost of one recall case per inmate in 2021 (HK\$)	Cost saving if recall rate can be improved by 36.7% or for 111 inmates (HK\$)	Cost saving if recall rate is 0%, i.e. improved for all 302 inmates (HK\$)
Arrest	21,060 per arrest (2014)	25,050 ¹³	25,050	2,780,550	7,565,100
Incarceration	32,263.1 per inmate per month (2014)	38,376 ¹⁴	115,128	12,779,208	34,768,656
Averted crime cost			140,178	15,559,758	42,333,756
Loss of productivity due to incarceration	1,650 per week (2021)		21,450 ¹⁵	2,380,950	6,477,900
Total			161,628	17,940,708	48,811,656

Source: Yip. (2017). Assessing the Socio-economic Costs of Drug Abuse in Hong Kong SAR; reference year: 2014

¹² To have consistent cost basis, the unit cost in 2014 was adjusted to 2021 using the below the inflation rates,

Year	2014	2015	2016	2017	2018	2019	2020	2021
Inflation rate	4.44	3.00	2.41	1.50	2.41	2.90	0.33	0.70

Source: The World Bank, <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?end=2020&locations=HK-LT-B8&start=2014&view=chart>

¹³ $21,060 \times 1.044 \times 1.030 \times 1.024 \times 1.015 \times 1.024 \times 1.029 \times 1.003 \times 1.007 = 25,050$

¹⁴ $32,263.1 \times 1.044 \times 1.030 \times 1.024 \times 1.015 \times 1.024 \times 1.029 \times 1.003 \times 1.007 = 38,376$, since the duration on detain is 3 months on average, the cost one recall case per inmate is $38376 \times 3 = 115,128$.

¹⁵ As the duration of detain is 3 months or $3 \times 4.348 = 13$ weeks, the cost of loss productivity is $1,650 \times 13 = 21,450$.

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(F) Recommendations



1.1. Enhance individual risk and needs assessments

Early intervention, personalized and targeted treatment plans

2. Foster positive social networks

Visitations, peer mentoring/counseling, spiritual care and grouping of offenders should each be given greater consideration

3. Evaluate rehabilitation programmes

To establish what works and what does not work, periodic collection of data and rigorous evaluation pertaining to rehabilitation programmes are essential

4. Increase post-discharge support

Career training and planning are important for helping offenders to reintegrate into the community and find a stable income (should be offered prior to release and in the period immediately following discharge)

5. Strengthen clinical and community partnerships

More frequent stakeholder consultations and sharing ought to be considered to ensure a set of common targets and priorities that incorporate the perspectives and expertise of different parties

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Thank you for your kind attention.

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Q&A Session

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