Assessing the Socioeconomic Costs of Drug Abuse in Hong Kong SAR

Executive Summary

This report estimates the socioeconomic costs of drug abuse in Hong Kong in the year 2014. This provides a local economic assessment of the burden of drug abuse.

Drug abuse, in this study, refers strictly to the abuse of illicit drugs. Tobacco, alcohol, and licit drugs such as prescribed medications and over-the-counter drugs were excluded. This study comprises of four parts – 1) estimation of the socioeconomic costs of drug abuse; 2) estimation of the "hidden" drug abuse population; 3) service pathways analyses; and 4) breakdown of the costs by age, genders, and types of drugs. Data collection was broadly split into two components – secondary and primary. Secondary data collection included existing databases and online searches, while primary data collection included a survey on drug users (N=364), information sheets, drug user interviews (N=26), stakeholder interviews (N=13) and focus group (N=4), and a qualitative survey on stakeholders (N=6).

Socioeconomic cost attributable to drug abuse

The **total cost** of drug abuse in 2014 was estimated at HK$7.08 billion (HK$781,037 per drug user). The total cost consist of (1) social tangible cost, (2) private tangible and (3) total intangible cost.

(1) The **social tangible cost** attributable to drug abuse was estimated at HK$3.98 billion (HK$439,205 per drug user). Social tangible costs were classified into five major categories – loss of productivity, crime and law enforcements, healthcare, welfare and others. The largest part was contributed to by crime and law enforcements, accounting for 41.2% of the total social cost, followed by loss of productivity (32.7%) and healthcare (11.7%). The single item with the highest cost was found in incarcerations, at HK$1.15 billion (28.9%).

(2) The following items were chosen to estimate **private tangible cost** attributable to drug abuse – consumption of drugs excluding drug productions (HK$711.43 million) and property destruction (HK$4.43 million).

Combining it with the social tangible costs, the (1+2) **total tangible cost** was estimated at HK$4.69 billion**.**

(3) This study quantified the private intangible costs of drug abuse. The potential years of life lost attributable to drug abuse in 2014 was 3,618 years, while the quality-life years lost was estimated at 1,040 years. The associated **total intangible cost** was estimated at HK$2.38 billion.

"Hidden" drug abuser

This study attempted to estimate the size of the "hidden" drug abuse population in order to adjust for the possible underestimations in the costs stated above. A generalized partial linear regression model was used to estimate the size of the drug abuse population over the period 2006-2014. There was a gradual decrease in the total observed and estimated numbers of drug users in Hong Kong. The estimated number of the drug abuse population decreased from 47,361-52,780 in 2006 to 18,974-22,658 in 2014. As reflected by reporting rates, the hidden drug abuse issue was more serious among the youngest age group (<21) and ketamine users.

Cost attributable to drug abuse (after adjustment to "hidden" drug abuser)

The cost attributable to drug abuse was re-calculated, adjusting for the issue of the "hidden" drug abuse population. The **social tangible cost** attributable to drug abuse in 2014 reached HK$5.69 billion (HK$251,040 per drug user), increased by 43.0% before adjustment. Loss of productivity accounted for the largest portion (42.0%), followed by crime and law enforcements (29.3%) and healthcare (13.9%). The **total tangible cost**, after adjustment, increased to HK$7.17 billion, and the **total cost** increased to HK$10.33 billion (HK$455,785 per drug user).

Service pathway

Service pathways of drug users were investigated both quantitatively and qualitatively. For the quantitative part, the majority of drug users were found to enter the system through the Police Force (32%) and Outreaching Teams / Integrated Services Centres (21%).

The transition pattern between reporting agencies is significantly different between younger (≤30) and older (>30) drug users. Younger individuals have more frequent contact with the social services. Service pathways reflect a complex and highly dynamic interaction between different service systems - criminal justice, healthcare and social welfare. From the qualitative data, many drug users find themselves involved in more than one system, either moving from one to another or simultaneously. While systematic coordination between service systems is rare, small scale partnerships between service agencies across the systems have enabled drug users to receive multiple services of different systems at the same time.

- Criminal Justice System

  Echoing with the Central Registry of Drug Abuse (CRDA) findings, the qualitative data indicate that the criminal justice system is the most commonly engaged system for drug users. Throughout, the entire service pathway is long, and has the least partnerships with other service systems. Drug users who are sentenced to correctional institutions are pulled out from most healthcare and social welfare services, however, it was observed that they were involved already in the services before arrests.

  The pathway into the criminal justice system is most commonly prompted by an arrest for 'Possession of dangerous drugs' (DD). Habitual drug users reflected the loss of deterrence effect of drug addiction treatment centres (DATCs). It is common for them to be arrested for DD and sentenced to correctional institutions where they report meeting and networking with other users in prison.

- Healthcare System

  Healthcare services for drug users are mainly the methadone clinics and public hospital medical services, including the substance abuse clinics (SAC). The out-patient nature of the methadone and SAC have enabled clients to engage in multiple services at the same time, such as being followed up by social workers.

  Stigma on drug users and their 'serves you right' attitude from doctors and nurses in non-SAC clinic have inhibited drug users from seeking help from hospitals. This also contributed to the under-reporting of the CRDA, as drug users tend to conceal their drug use habit when they require urgent medical attention at the Accident and Emergency (A&E). Furthermore, drug users might have been engaging in the service system without being registered.

  With the variety of medical services offered to drug users, harm reduction became the major service goal among the practitioners working in drug treatment services. Apart from methadone clinics, practitioners in SACs pointed out harm reduction as a more pragmatic and realistic alternative than to ask clients to quit using drugs. The CRDA reflected a high retention rate in the SACs and methadone clinic services, hinting the higher ability to keep drug users in the service and at least stay monitored via the harm reduction approach.

- Social welfare pathway

The social welfare pathway is highly dynamic and flexible. Community-based and residential DTRCs are readily available to drug users. The quality of their service heavily depends on the relationship with the individual social worker. A positive relationship between clients and social workers is a motivating factor for drug users to remain in treatment. Young drug users share a higher chance of engaging in the social service system, as a significant number of outreaching teams in NGOs have primarily targeted young drug users as one of their service targets. Outreaching services provide support service via establishing relationships with young drug users. This enabled a continuous monitoring of the NGO's previous clients and provided support when necessary after an outreaching social worker 'closes a case'. While the CRDA reflected a high dropout rate among youths in these services, the qualitative findings revealed that clients are still under the radar of outreaching social workers.

Drug users mostly attempted to quit drugs by themselves before seeking help from residential DTRCs, from self-retreats to Mainland China, locking themselves up in a hotel room without drugs, to drug substitutions. They only reach out to the DTRCs when they feel they have exhausted other options. Multiple re-entries to different DTRCs are common among habitual drug users as well, mainly due to quick relapses upon the end of treatment, or the clients themselves have quit the program.

The flexibility of the social welfare system enables partnerships with both the criminal justice and healthcare system. Apart from regular contacts between social workers and probation officers, collaborations between residential DTRCs and hospitals' psychiatric ward are also observed. Some DTRCs have even established partnerships with corporates and media to assist a better quality of drug treatment services. The high flexibility of the social welfare services therefore, serve as a good locale where systematic coordination between services can be organized with the two other systems.

Interpersonal relationships relating to service pathways

Relationships with family, community and service providers served as a significant determinant impacting the service pathways experienced by drug users, particularly among female users. Broken relationships are found related to relapses and intensified drug usage, while establishing strong relationship with a community affects their motivation to join drug treatments or seek medical attention.

Transition among the criminal justice, healthcare and social welfare systems

Two types of transitions between systems are observed: natural and abrupt transitions. Natural transfers from one service to another is commonly seen in the healthcare and social welfare systems, where doctors and social workers easily refer clients to different services according to their needs. Abrupt transfers however are commonly found in the criminal justice system due to police arrests, where 23 out of 26 drug user interviewees have been forced out of their original service upon their arrests. Urgent medical illness that requires emergency medical attention served as the second largest cause for drug users to be immersed in the healthcare system, albeit usually reluctantly or involuntarily.

Cost breakdown by age, gender and types of drugs (after adjustment to "hidden" drug abuser)

This report also attempted to estimate the annual social tangible costs per drug user of different genders, age groups, and types of drug uses. Owing to data limitation, it should be noted that the following points presented some ball-park figures and should be interpreted with great caution.

- Men accounted for 84.4% of the social tangible cost of drug abuse. The average social cost per male drug user was HK$254 thousand in 2014, 7.2% higher than the female counterpart, at HK$237 thousand.
- Age group 21-30 accounted for the largest proportion of social tangible costs (32.7%). The average annual cost per drug user increased by age, from HK$177 thousand for those aged <21 to HK$323 thousand in the age group 41-50, and remained similar in the oldest (>50; HK$309 thousand).
- A drug user who **mainly** used heroin had the highest average cost, at HK319 thousand among all types of drugs in 2014. Drug users who **mainly** used ketamine had the lowest, at HK$208 thousand.

Recommendations

The findings of this study offered several recommendations in three areas, both short and long-term. The three areas are (1) improvements on the monitoring and surveillance system, (2) assessing cost effectiveness and the relevance of services, and (3) re-assessing current drug policies.

1. For improvements on the monitoring and surveillance system, recommendations were made on tackling the "hidden" drug users issue, revising the record sheet of CRDA (short term), and establishing Community Epidemiology Work Group (long term).

2. For assessing cost effectiveness and the relevance of services, recommendations were made on made on further research evaluating the current drug-related treatment services, evaluating the understanding on drug users among service providers and providing training packages to reduce the stigma (short term), and extending SAC services to the methadone clinics (long term).

3. Two long term recommendations were made regarding to re-assessment on current drug policies. First, drug courts should be introduced to re-balance the expenditure on law enforcement. Second, a shift of approach to drug use as a public health issue should be considered in Hong Kong.

The total cost attributable to drug abuse was nearly 10.33 billion, which is about 460,000 per person per annum. The Hong Kong government should improve the current service system in order to improve the cost effectiveness. Further research needed to be done on the effectiveness of various services provided by the NGOs.