# SUBSTANCE ABUSE TREATMENT POLICY IMPLICATIONS DERIVED FROM ROUTINE STATISTICAL REPORTS

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Abstract. Substance abuse poses both economic and social threats. Medical treatments for substance abusers are considered as one of the main strategies to tackle with the problems. For each episode of cases seeking medical treatments, data are routinely collected and reported to the Department of Medical Services and copies to the Office of Narcotics Control Board of Thailand. However, they are rarely analyzed and used. This paper demonstrates an example how a basic analysis, with occasional substantiation from other databases or basic knowledge, can lead to meaningful policy options for medical treatments of substance abuse in the near future.

## INTRODUCTION

Substance abuse is a major social problem in Thailand. It causes both physical and psychic dependence which requires increasing amount of drugs to satisfy the needs. It is widely recognized that substance abuse poses serious threats to national security, economic growth and development, and, not to mention, public health. The Royal Thai Government has been spending millions of Baht each year to prevent and treat substance abusers. A study (Nareotic Affairs Section, 1994) found that there were approximately 1.27 million Thai people addicted to some kind of illegal substances in 1993. Agricultural workers and students accounted for the majority of addicts. The total number of cases is increasing each year.

The Department of Medical Services, under the Ministry of Public Health, is the main responsible institute to provide medical treatment to substance abusers. It has an advanced treatment institute located in central Thailand and four regional and one provincial treatment centers spread across the country. In addition, other hospitals in the Ministry of Public Health and other ministries also play roles in providing therapy to the addicts. In the Eighth National Health Plan (1997-2001), the Department of Medical Services has requested to spend 500-1,000 million Baht per year for substance abuse treatment. All substance treatment facilities in Thailand which provide treatments to substance abusers are required by the Office of Narcotics Control Board (ONCB), under the Office of the Prime Minister, to report data on the addicts. These data were collected, collated and published on a yearly basis. However, few attempts have been made to analyze the data in more details, to make use of the reports and to formulate treatment policy options out of the routine statistical reports. It is the intention of this paper to secondarily analyze the data and try to make some use of the data to, if at all possible, come up to treatment policies which are relevant to the situation of narcotics in Thailand.

#### MATERIALS AND METHODS

The annually-published Statistical Reports FY 1987-1996 (Department of Medical Services, 1988-1997) by the Department of Medical Services of the Ministry of Public Health and the Institute of Health Research of Chulalongkorn University were collected and further analyzed. The analysis plan consisted of four parts, ie demographics of the addicts, intrafamilial relationships and history of incarceration, geographical distribution, and type of drugs used. The demographics part includes age, sex, education, employment and marital status. Intrafamilial relationships are based upon subjective reports of the addicts of whether their parents still lived together and the relationships were considered "warm". If so, the relationship is classified as "intact and warm". If not, it is classified as "otherwise" which includes single-parent families, families with frequent quarrels, abandoned children, and other categories. The addicts were also asked if they were ever incarcerated. The distribution of cases of addicts by region was explored. The type of illicit drugs used by the addicts was also studied.

# RESULTS AND DISCUSSION

The results are classified into two parts, *ie* brief epidemiologic descriptions, and policy implications

# Brief epidemiologic descriptions

As shown in Fig 1, the majority of addicts are male and the number is increasing year by year.

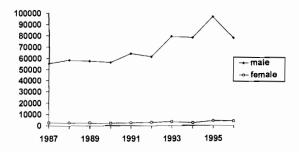


Fig 1-Sex distribution of substance abusers seeking treatments, 1987-1996.

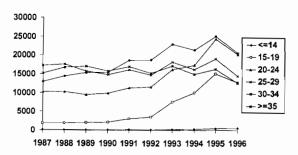


Fig 2-Age distribution of substance abusers seeking treatments, 1987-1996.

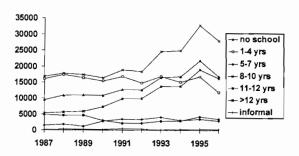


Fig 3-Distribution of years of education of substance abusers seeking treatments, 1987-1996.

The small downturn in 1996 is most likely due to delayed reporting. Adolescents and young adults are at high risks of substance abuse and the proportions of increase (Fig 2) corresponding well with the overall trend of increase. No educational backgrounds spare people from substance abuse (Fig 3). Both employed and unemployed people who abuse illegal substances have increased over the years (Fig 4). The number of addicts who are divorced or separated does not significantly increase over the period of 1987-1996, while (Fig 5) the number of cases who are single or married increased over the years. In Fig 6, it is of interest to note that almost half of all cases reported that there families are

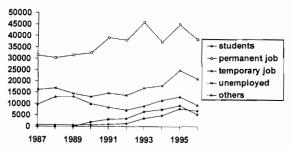


Fig 4-Distribution of employment of substance abusers seeking treatments, 1987-1996.

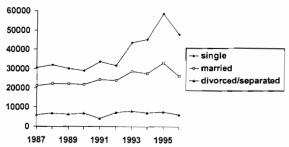


Fig 5-Distribution of marital status of substance abusers seeking treatments, 1987-1996.

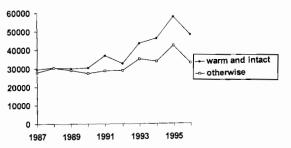


Fig 6-Intrafamilial relationships of substance abusers seeking treatments, 1987-1996.

either broken (not intact) or "not warm". The number of the addicts who reported that they were ever incarcerated decreased over the 10-year period but is still significant (Fig 7). All regions show increasing number of cases but the rate of increase is highest in the central region, (Fig 8). At the macro level, Fig 9 shows that the majority of the increasing cases are heroin addicts while the numbers using other drugs are relatively stable. However, a closer look with heroin addicts excluded shows in Fig 10 that the number of amphetamine users shows a surprisingly increasing trend, while the cases of opium users show a suggestive decline.

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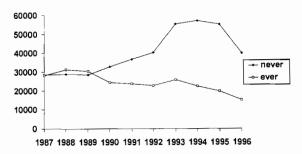


Fig 7-History of incarceration of substance abusers seeking treatments, 1987-1996.

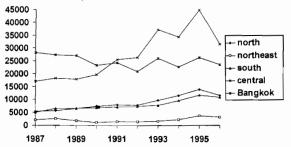


Fig 8-Geographical distribution of substance abusers seeking treatments, 1987-1996.

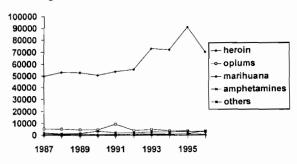


Fig 9-Type of drugs used by substance abusers seeking treatments, 1987-1996.

### Policy implications

The routinely collected data are very important in identifying population subgroups who are at risk of substance abuse. However, to determine the risk level, we need the size of the population subgroups to serve as the denominator. Without the denominator, it may be illusional, to say that people aged 35 years or more are at the highest risk. The number of those who are 35 years or over (which is an open-ended category) is larger than the number of those who are 15-19, 20-24, or other closed age categories. By the same token, it would be hazardous to label those with 8-10 years of education, those with permanent jobs, and the singles, as the highest-risk groups. The only exception is when sex

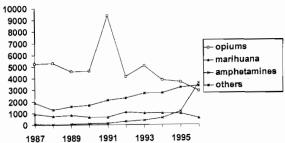


Fig 10-Type of drugs (HEROIN EXCLUDED) used by substance abusers seeking treatments, 1987-1996.

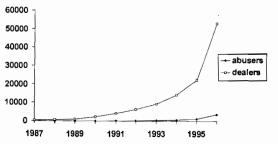


Fig 11-Amphetamine abusers seeking treatments versus amphetamine dealers arrested, 1987-1996.

distribution is considered. Because the male-to-female ratio of the overall population of Thailand is about 1:1, the number of male addicts, which clearly outnumbers that of female addicts, should be sufficient to conclude that males are at much higher risk than females. However, with all these limitations and exceptions, one clear thing is that substance abuse spares no population subgroups. The treatment policies should continue to keep the opportunities open for all Thais who are affected by the health problems of substance abuse to have access to the medical care they ne d without geographical and, more importantly, financial barriers. Introduction of user fees or co-payments, as occasionally raised, is likely to prohibit the socially-disadvantaged peripheral groups from having an access to the needed care.

The care process does not end within the hospital but rather takes into consideration the social environments of the addicts. Intrafamilial relationships and other social conditions can be both supportive and damaging to the success of the treatments. The routinely collected data on intrafamilial relationships and history of incarceration, although needing further verification, are important in term of policy. It will require the Department of Medical Services to prepare paramedical personnel who can assist doctors in providing appropriate health and

social counseling so that the addicts can have a new life after completing treatments. Emphasis may need to be put upon destignatizing the incarceration history and promoting full integration into the mainstream of the society.

The increasing number of cases in the central region must be interpreted with caution. It may be correct if we say that the substance abuse is epidemic in the central region of Thailand. However, with the knowledge that the Thanyarak Hospital which is the largest substance abuse treatment facility in the country is located in the central region, we may assume that the increasing number of cases seeking treatment in the central region may be bypassing other regional and provincial facilities and going directly to Thanyarak Hospital. Therefore, policy may be formulated to strengthen and expand regional and provincial substance abuse treatment facilities so that people can be appropriately cared for near their hometowns.

Figs 9 and 10 point to an interesting case demonstration that an overview of the problem may hide important developing trends. Without exclusion of heroin from the graph, we may not be able to notice to the rising trend of cases with amphetamine abuse who seek medical treatments. When we examined the data from the Office of the Narcotics Control Board on the number of drug dealers arrested and plotted the number of amphetamine dealers and the number of amphetamine abusers seeking treatments, as shown in Fig 11, the two curves are almost parallel but 2-3 years apart. According to the supply-demand economic rule, the number of amphetamine dealers reflects the number of amphetamine abusers which, in turn, is reflected in the number of the abusers seeking treatments. It can be projected that in the next few years, there will be a rapid increase in the number of people seeking treatments for amphetamine abuse and the Department of Medical Services will have to prepare for this. In addition, as shown in previous studies and also in one of our own studies (Dasananjali, 1997), amphetamine abuse is associated with traffic accidents and injuries. The Department of Medical Services which is also responsible for traffic injury prevention and control will need to be well-prepared for the double jeopardy.

## CONCLUSION

Substance abuse is an important public health problem which has been in the center of government's

attention for many years. There is a well-developed information system which routinely collected data on persons seeking treatments for the abuse. However, the data are rarely analyzed and, with more rarity, linked to policy. This report demonstrates on how the routinely collected data might be used to point to policy direction by looking at demographics, family and social environments data, geographical distribution, and type of drug use. With corroboration of other databases and basic knowledge of health systems, some meaningful policies issues can be derived. However, it has to be cautioned here that, before formulating and implementing the policies, we will need to have more detailed data from the source and from other sources to concur that the policies are sound, appropriate and relevant, and to serve as the baseline for monitoring and evaluation.

### ACKNOWLEDGEMENTS

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