Research on the Trend of Drug Abuse, Needs for Drug Use Treatment Services and Development Plans in Macao

Abstract

(1) Research Objectives

The purposes of this study are to estimate the extent of drug abuse, understand the nature and potential influences of hidden drug use, and identify the risk factors among the drug abuse group. Based on the results of data analysis, this report describes and assesses the effectiveness of the drug treatment services and programs currently implemented in Macao. Specifically, the major objectives of the study are as follows:

1. Help the Macao SAR government and the public gain a comprehensive understanding of the extent of drug abuse in Macao through generating reliable estimates of the prevalence rates of drug abuse, using a sample representative of the general population.

2. Systematically assess the causes and challenges of drug abuse by examining psychological characteristics, family background, living conditions, and social relationship networks of drug abusers.

3. Identify the specific risk factors among the drug abuse group and their service needs through a comparative analysis of respondents who used drugs and those who did not use drugs.

4. Identify hidden drug users in Macao to develop more effective social service and intervention programs, through the examination of the utilization of drug treatment services by drug abusers.

5. Collect and analyze data on drug users' involvement in treatment services and their related experiences and outcomes, assess the effectiveness of current services and programs, and strengthen resource allocation for drug treatment services.

(2) Research Method

1. Household Survey: 2,917 valid questionnaires were collected from 1,906 households drawn through probability sampling to assess the prevalence of drug abuse in Macao and assess the extent of hidden drug use.

2. Respondent Driven Sampling: Provide a comprehensive and detailed study of the 359 drug abusers in Macao, evaluate the effectiveness of drug treatment services and explore service improvement strategies.

3. Focus Group Interviews: Interviews with representative government agencies and non-governmental organizations that provide drug treatment services to understand the services, assess program efficacy, and identify improvement areas to enhance service quality.

Through the analysis of the data collected from these sources, this study aims at achieving a comprehensive and in-depth understanding of the drug abuse problems in Macao.

(3) Research results

The results show that the prevalence rates of drug use in lifetime, last year and last month among Macao residents are 4.83%, 1.27% and 0.89%, respectively. Compared to those in Europe, North America and nearby Asian regions, these rates are all very low. More than half of the drug users abused prescription drugs, which deserves attention. Excluding prescription drugs, the drugs used most frequently among Macao residents are marijuana, ecstasy, new psychoactive substances, ketamine, inhalants, and methamphetamine as ranked in the order of frequency of use.

In this study, hidden drug users are defined as individuals who used any illicit drug or abused any prescription drug but did not seek help from professionals or receive drug abuse treatment or services from government treatment service agencies, social service organizations and medical institutions because of drug use. Among the 141 respondents who reported drug abuse, 119 of them did not seek help from professionals or receive any drug abuse treatment and service, resulting in a rate of 86.40% in hidden drug use. Many factors contributed to hidden drug use. On the individual level, drug users did

not experience strong discomfort physically after drug use and were resistant to treatment and services. On the social level, the public's low acceptance of drug users and the criminalization of drug use caused drug users to conceal their identity. Additionally, residents from non-Chinese speaking regions were less likely to recognize the problem of drug use because of the difference in cultural norms concerning drug abuse. On the pharmaceutical level, the shift in types of drugs consumed increased users' tendency to use drugs that are harder to detect such as methamphetamine and new psychoactive substances. The use of drugs outside Macao further aggravated the problem of hidden drug use among Macao residents.

Among the drug abuse group who participated in the survey through respondent driven sampling, curiosity is the most important reason for first-time use while having drug use friends and relieving strain are the second and third most important reasons. This group had relatively higher levels of drug use in the last year than the drug users in the general population, but their prevalence rate was still less than half of the rate of drug use in the last year among comparable groups in Europe and North America. The comparison shows that Macao has been effective in preventing drug users from using drugs again through treatment provided to high-risk drug use groups. The drugs used most frequently by the drug abuse group were methamphetamine, marijuana, ketamine, cocaine, and ecstasy as ranked in the order of frequency of use. Few of them abused prescription drugs.

In terms of substance use disorders, 122 or 34.96% of the 349 drug users who participated in the interviews or filled out the questionnaire had no disorder, 148 or 42.41% of them had mild disorders, and 70 or 22.64% of them had medium or heavy disorders. Compared to drug users in the compulsory isolated drug detoxification centers in Mainland China, the drug abuse group in Macao had an overall moderate level of substance use disorders.

The age of Macao drug abuse group is concentrated in the range of 25 to 50, with the average age at 40. Most of them are male. They received less education than the drug users in the sample of the general population (household sample). More than half of the drug abuse group had only middle school or lower level of education. Only about 40% of them had a fulltime job.

More than 130 drug abusers in Macao received drug treatment and services in the past 12 months, with nearly 70% of them successfully completing the treatment and services. The service recipients provided positive appraisals of the professionalism, suitability, and efficacy of the treatment and services. On the other hand, the survey shows that the top three services in demand among drug abusers in Macao are psychological counseling and guidance, social support services (interest-oriented class, family relationship healing, residential care, etc.), and social assistance (allowance aid, food banks, etc.).

Multiple risk factors existed for drug abuse. The findings indicate that drug abuse peer association, peers' drug abuse attitudes, childhood maltreatment and neglect were common risk factors among drug abusers in Macao in both the household survey sample and the RDS sample. In Macao's general population, antisocial personality disorder was a specific risk factor for drug abuse. Hostility, risk-taking, normative belief, and low self-control are specific risk factors for substance use disorders among the drug abuse group. When quantitative and qualitative data were combined, peers continued to be a major predictor of drug abuse. To have a friend who abused drugs was a major risk factor for first-time drug use. Moreover, lack of understanding of the harm of drugs could also cause and strengthen drug users.

Overall, the focus group interviews validate the results of quantitative surveys, indicating that peer influence is a major cause of drug abuse. Meanwhile, lack of accurate understanding of drug abuse, underestimation of the dangers of drugs, and not knowing that drug use is illegal could all contribute to or exacerbate drug abuse among some drug users. The focus group interviews indicate that drug treatment and service providers still face many challenges, including social workers' inadequate ability to provide psychological counselling, insufficient resources, society's low acceptance of drug users, and the difficulty of establishing relationships with drug abusers as well as the inability to help when treatment participation is involuntary. These challenges point to the future directions of treatment improvement and development. Overall, while some limitations still exist in drug treatment and services, existing drug abuse treatment and services in Macao can basically meet the needs of the drug abusers and have achieved significant progresses in preventing relapse and reducing harms of drug abuse. The results demonstrate the efficacy of Macao's model centered on the collaboration

between government agencies and non-government organizations in the provision of drug treatment services.

(4) Research recommendations

The Macao SAR government should continue to pay special attention to high-risk drug abuse groups in Macao as the prevention of drug abuse among these groups are the most effective way to reduce drug abuse problems in the society. Drug treatment and services for drug abusers should be comprehensive and should help addicts resolve multiple problems they face, including physiological, psychological, family, social, and economic issues. It is vital for different government agencies to collaborate with one another to form a cross-sectoral and multi-system treatment and service structure.

To reduce hidden drug use, the government should focus on four areas. First, the prevention of drug abuse efforts should strengthen drug use education, help people with potential substance use disorders understand the process of drug addiction and harms of drug abuse, and encourage them to seek timely assistance from social workers and other professionals. Second, reduce discrimination against drug users on a societal level. The reduction of social exclusion can increase the likelihood that drug users may seek treatment and services voluntarily. Third, recognize the potential physical, psychological, and social consequences of prescription drug abuse. Society should raise public awareness of prescription drug abuse and its consequences, identify service needs for prescription drug abusers, and explore ways to prevent and control personal and social problems caused by prescription drug abuse. Fourth, increase drug abusers' knowledge of treatment services and encourage more individuals to seek and participate in relevant programs and services to reduce the level of hidden drug use.

Peer and friend influence was the strongest predictor of drug abuse. Thus, reducing contact with drug use friends and establishing healthy social relationship networks are the most effective ways of preventing and decreasing the problems of drug abuse. Considering drug abusers' psychological problems, which include antisocial personality disorders, elevated hostile and risk-taking tendencies, and low self-control, drug treatment providers should arrange trained professionals to provide psychological counseling and treatment in these areas.

To further professionalize treatment services, the Macao SAR government and drug treatment service providers should provide more structured treatment and service programs that promote social reintegration through vocational skills training, employment assistance, social relationship restoration, and family support services.

Because of the complexity of the drug abuse problems, the Macao SAR government should build a balanced treatment system and maintain the multimodal service model incorporating both community-based and residential treatment. The projected ratio of 16:1 in the numbers of drug users who need community-based treatment and residential treatment, respectively, as well as the disparities in the amount of space, staff, and resources required by these two forms of drug treatment services should serve as a reference for the government in developing the two types of services in the system.