

# Research on Optimization of Adolescent Drug Abuse Prevention Policies in Macao

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**Abstract:** *Background:* Adolescent drug abuse is an urgent social problem that needs to be solved. This paper aims to explore the optimization of Macao's adolescent drug abuse prevention policy. *Methodology:* This research uses observation and literature review methods to analyze the shortcomings of the current policy. *Results:* The study found that Macao's adolescent drug abuse prevention policy has five main challenges, including the weakening of family functions, drug distribution becomes internet-based, the decentralized anti-drug framework, the leniency of criminal penalties for drug-related crimes, and the concealment of drug use and trafficking. *Conclusions:* The author proposes strategies in five areas: firstly, promoting the development of anti-drug education towards a family-oriented approach; secondly, making full use of the power of the internet to prevent drug abuse through technology-enhanced precision; thirdly, further improving the anti-drug mechanism by establishing specialized channels for assistance; fourthly, increasing the penalties for drug crimes to combat the root of drug trafficking; finally, encouraging multi-party cooperation and exchange to establish an interconnected intelligence information system. This paper hopes to provide references and insights for the improvement of public policies on drug prevention among youth in Macao.

**Keywords:** adolescents; drug abuse; prevention; public policy

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## 1. Introduction

Macao has a serious drug problem and has become a drug transit point for international drug trafficking groups. Compared with neighboring regions, the penalties for drug crimes in Macao are lighter. In mainland China, Taiwan and Singapore, the maximum penalty for drug trafficking is the death penalty, while in Macao it is only fixed-term imprisonment. Due to the lower cost of committing crimes, Macao has become a paradise for international drug trafficking groups to transport drugs. On the other hand, since the opening of gambling rights in Macao in 2002, the number of visitors to Macao has surged. Among these entrants, some engage in illegal activities with casinos and entertainment venues, selling drugs to local residents or tourists and even inducing youths to use and transport drugs.

Adolescence refers to a transitional period from children who end their dependence period to independent adulthood, marked by a sudden and rapid growth in physical development,

and significant changes in physiology, psychology, emotions, social interactions and behavior; it is also a crucial stage for socialization. According to the age definition of adolescents by the United Nations, they are a group between 15 and 24 years old; the World Health Organization believes that the age of adolescence is between 10 and 19 years old. This study is based on the Central Registration System for Drug Abusers of Macao<sup>1</sup> (hereinafter referred to as the Central Registration System), which defines the age of reported adolescents as drug abusers under 21 years old.

With the continuous development of society, adolescents face many different changes and challenges, which will inevitably lead to various psychological or behavioral problems. Among these, the problem of adolescent drug use has always received significant attention worldwide. Criminals take advantage of the characteristics of adolescents, such as lack of life experience, interest in trendy things, and herd mentality to lure them into using drugs, making the issue of adolescent drug use a major concern for society.

The behavior of drug use among adolescents is regulated by Law No. 17/2009, “Prohibition of Illegal Production, Trafficking, and Consumption of Narcotic and Psychotropic Substances” (hereinafter referred to as the Anti-Drug Law), as amended by Laws No. 4/2014, No. 10/2016, No. 10/2019, No. 22/2020, and No. 10/2021. Adolescents, as a special group, are treated differently by the law, whether it is from the “United Nations Guidelines for the Prevention of Juvenile Delinquency”, the mainland's criminal policy of “education as the primary, punishment as the secondary” for crimes committed by minors, or Macao's “Juvenile Delinquency Education and Supervision System”. These reflect the legal distinction in the treatment of juvenile delinquency, with prevention and education always being the core of managing juvenile crime issues.

Currently, scholars both domestically and internationally have proposed numerous perspectives and insights on the causes (Zhuang, S., 2015; Yang, L., 2016; Nawi, A.M. et al., 2021), impacts (Newcomb, M. D., & Bentler, P. M., 1988; Jain, R., & Balhara, Y. P., 2010; Somani, S., & Meghani S., 2016) and intervention (Lewis, R. A. et al., 1990; Wagner, E., & Waldron, H., 2001; Steele, D. W. et al., 2020) of adolescent drug use. However, literature analyzing adolescent drug prevention policies from a macro perspective is relatively sparse, particularly lacking are studies specific to Macao. This gap highlights a significant area for further research within the context of Macao. Therefore, this paper, by exploring the drug use problem among Macao's adolescents and proposing suggestions for improving related prevention policies, which has positive and far-reaching significance for paying attention to the healthy growth of teenagers, maintaining social stability and improving public health.

## 2. Materials and Methods

This paper primarily utilizes two research methods: observational and literature review. The observational method involves directly or indirectly observing the phenomenon of drug use

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<sup>1</sup> “Central Registration System for Drug Abusers of Macao” is an electronic reporting system established in 2009 by the Social Welfare Bureau and a number of official and private units. The system centralizes and organizes the information of drug abusers it comes into contact with. Through the system, it can reflect the real situation and grasp the situation. The latest trends in the number of drug addicts and drug problems in Macao. [https://www.antidrug.gov.mo/mo\\_commit\\_ent/register/](https://www.antidrug.gov.mo/mo_commit_ent/register/)

among Macao's adolescents, collecting relevant data and information, analyzing the characteristics and trends of adolescent drug use, as well as the effectiveness and deficiencies of Macao's current anti-drug policies. The literature review method involves examining relevant books, journals, reports, and policies from both domestic and international sources to understand the theoretical foundations of the adolescent drug problem and to draw upon some effective anti-drug strategies and measures. These two methods complement each other, not only reflecting the actual situation of drug use among Macao's adolescents, but also providing theoretical guidance and reference, laying the foundation for the suggestions for policy optimization proposed in this paper.

### 3. Results

#### 3.1 Characteristics and trends of adolescent drug abuse in Macao

##### 3.1.1 Overall drug abuse data continues to decline

According to data from the Central Registry System, the number of reported drug abusers from 2018 to 2022 was 424, 346, 219, 231, and 85 respectively. Among these, the number of reported adolescent drug abusers was 24, 31, 16, 12, and 4 respectively, accounting for 5.7%, 9%, 7.3%, 5.2%, and 4.7% of the total proportion respectively. Overall, the number of reported drug abusers and the proportion of reported drug abusers under 21 years of age have both decreased in recent years.

**Table 1.** Overall drug abuse data in Macao

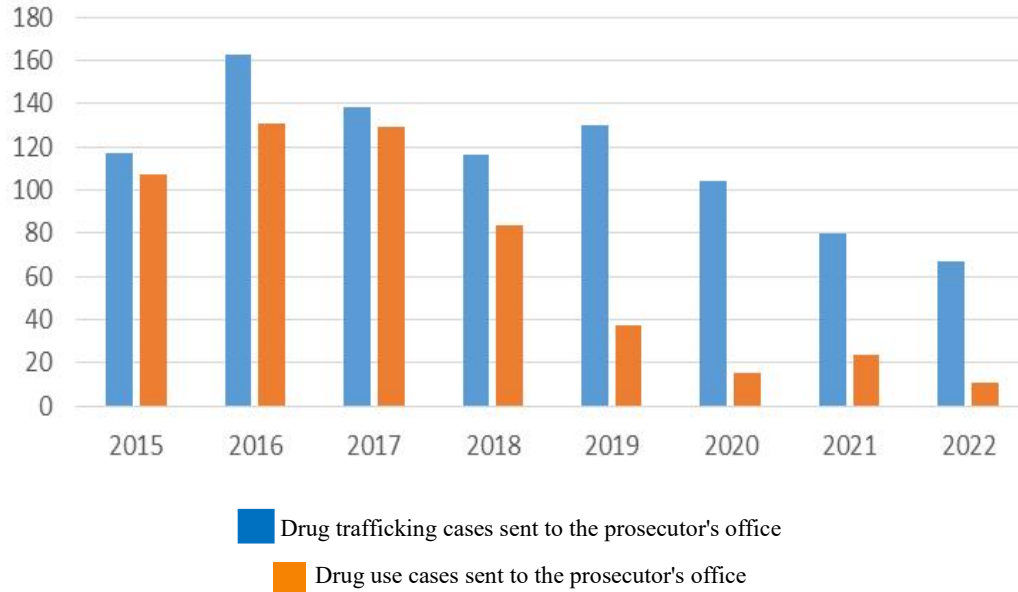
Year	2018	2019	2020	2021	2022
Number of reported drug abusers	424	346	219	231	85
Number of reported adolescent drug users	24	31	16	12	4
Percentage of adolescents among total	5.7%	9.0%	7.3%	5.2%	4.7%

Source: Central Registration System for Drug Abusers of Macao

On the other hand, according to statistics from the Judiciary Police, the number of people sent to the prosecutor's office for drug trafficking and drug use has also decreased in recent years. The reason for the continuous decline in overall drug use data is partly due to the effectiveness of anti-drug efforts; on the other hand, it is because the pandemic has hindered related anti-drug departments from accessing new cases from 2020 to 2022. However, it is important not to

overlook the issue of the clandestine nature of drug crimes, which has led to a reduction in both the number of reported cases and arrests.

**Figure 1.** Number of drug-related cases sent to the prosecutor's office (Macao)



Source: Judiciary Police of the Macao Special Administrative Region Government

### 3.1.2 New types of drugs consumed by adolescents have a more “concealed” nature

Despite the reported number of adolescent drug abusers showing a downward trend, it does not mean that the problem of adolescent drug use has improved. Adolescents most commonly use new types of drugs such as cocaine, marijuana, methamphetamine (ice) and ketamine (K powder). These new types of drugs, compared to traditional drugs like heroin, have a more “concealed” nature. They can be simply snorted or swallowed directly, rather than injected with a syringe. Because there is no need for drug paraphernalia, it is more difficult to identify drug use behavior among adolescents; furthermore, the discomfort and damage caused by these new drugs to the body may not become immediately apparent, often emerging gradually over several years and withdrawal symptoms are also less obvious.

On the other hand, the packaging of new types of drugs is highly deceptive. Drug trafficking groups, in order to deceive the public, disguise drugs as snacks, candies, or common beverages for sale, print them in different styles, and even name the drugs with terms like “coffee powder” and “happy water” to lower adolescents' vigilance and tempt them to use drugs, making the issue of adolescent drug use even more concealed.

**Table 2.** Types of drugs adolescent abuse (person times) in Macao

<b>Drug Type</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Cocaine	27.6	31.3	37.5	41.7	75.0
Marijuana	17.2	43.8	50.0	16.7	0.0
Methamphetamine (Ice)	31.0	12.5	12.5	8.3	0.0
Ketamine (K Powder)	10.3	6.3	0.0	0.0	0.0

Source: Central Registration System for Drug Abusers of Macao

### 3.1.3 *The locations where adolescents use drugs are concealed*

The places where adolescents abuse drugs are mainly at home or at a friend's home, which makes the concealment of adolescent drug abuse apparent.

**Table 3.** *Place of drug abuse among adolescents (person times) in Macao*

<b>Place</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Friend's house	24.3	30.0	25.9	33.3	25.0
Home	21.6	15.0	25.9	16.7	0.0
Discos/K rooms	24.3	30.0	22.2	0.0	50.0
Park/street corner/public toilet	2.7	0.0	3.7	8.3	25.0

Source: Central Registration System for Drug Abusers of Macao

### 3.1.4 The phenomenon of adolescent drug abuse is becoming “cross-border”

At the same time, the problem of adolescents crossing borders to abuse drugs is prominent. According to data from the Central Registry System, before the pandemic, the situation of adolescents crossing borders to use drugs was common. According to the statistics from 2018 and 2019, among the reported drug abusers under 21 years old, 33.3% and 58.3% respectively went to the mainland China and Hong Kong to use drugs. Due to the relatively lower drug prices and living costs in the mainland China compared to the Hong Kong and Macao regions, there is a greater choice of drug consumption locations, coupled with convenient transportation and 24-hour customs clearance, making it difficult for family members to detect same-day round trips. Additionally, adolescents generally believe that there is a lower chance of being arrested for drug use in the mainland China, thus attracting many Macao adolescents to use drugs there and even being instigated by criminals to smuggle drugs back to Macao for sale. Furthermore, with the opening of the Hong Kong-Zhuhai-Macao Bridge, transportation between regions has become more convenient, which has also led to an increase in the number of adolescents going to Hong Kong to use drugs, causing the trend of Macao adolescent drug crimes to become “cross-border” in recent years.

On the other hand, with the rollout of the “Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area” and the “Overall Plan for the Construction of the Hengqin Guangdong-Macao In-depth Cooperation Zone”, the movement of people between Macao, mainland China and Hong Kong has become more frequent. It can be anticipated that the number of Macao's youth going to the mainland China for living, education, and employment development will gradually increase. In response to the continuously increasing population of youth crossing borders, there is a chance that the trend of drug abuse or criminal behavior among adolescents will become “cross-border”.

**Table 4.** Region of drug abuse among adolescents (percentage) in Macao

Region	2018	2019	2020	2021	2022
Macao	66.7	41.7	73.7	100.0	100.0
Mainland China	14.8	11.1	15.8	0.0	0.0
Hong Kong	18.5	47.2	5.3	0.0	0.0

Source: Central Registration System for Drug Abusers of Macao

### 3.1.5 Drug distribution becomes internet-based

In recent years, the Macao Judiciary Police has cracked several cases of drug trafficking through parcels. During the COVID-19 pandemic, with entry and exit restrictions in place, drug trafficking groups have disguised drugs as various goods and trafficked them through parcels,

such as hiding them in toys, chocolate, glass bottles, and even keyboards, making the trafficking methods quite invisible.

**Table 5.** Example for “drug parcel” cases in Macao

Date	Brief description of drug crime cases
2021.03.09	Judiciary Police unveiled that a Hong Kong drug trafficking group was concealing drugs in computer keyboards and then smuggling them into Macao via mail, the Judiciary Police successfully arrested three local male and female drug dealers involved in the case, along with two other men, and seized cocaine with a market value of 35,000 Patacas.
2021.05.23	A local man purchased marijuana online, which was sent to Macao disguised as stationery through a logistics company. Judiciary Police intercepted the suspect collecting the package and found three cannabis oil cartridges weighing a total of 47.4 grams, 16.2 grams of cannabis buds, 2.3 grams of dried cannabis plant stems in the package and at the suspect's residence, valued at 65,000 Macao Patacas.
2022.02.16	Judiciary Police seized over 1,000 ecstasy pills disguised as chocolates in a parcel sent from the Netherlands to Macao, with a black market value of approximately 210,000 Macao Patacas. The Judiciary Police arrested four Vietnamese men responsible for receiving the “drug parcel”.
2023.03.15	The Judiciary Police arrested a local man and seized two suspicious parcels that were shipped from the UK via mainland China to Macao. Upon inspection, these parcels disguised as toys, containing 11.1 grams of methamphetamine and 7.8 grams of heroin, with a total value of approximately 50,000 Macao Patacas.

Source: Macao daily News

Furthermore, drug trafficking groups have even utilized adolescents to receive parcels and assist in drug trafficking. For example, in two drug trafficking cases that occurred in recent years, adolescents were recruited online for jobs, only to be roped in by criminals to traffic drugs. They would follow instructions to receive parcels and then resell the drugs. On the other hand, criminals also use online platforms to sell drugs to adolescents.

**Table 6.** Example for adolescent drug crime cases in Macao

Date	Brief description of drug crime cases
2020.05.28	A 17-year-old female student and her boyfriend were bought by a Hong Kong drug trafficking group, receiving a reward of 3,000 Macao Patacas, to assist in receiving “drug parcels” disguised as toys and reselling the drugs as instructed.
2022.01.03	A university student was recruited online by a criminal group to assist in drug trafficking, with a monthly salary of 3,000 Macao Patacas. An additional reward would be given for each successful sale of a package of drugs. The student was

	arrested by the police while receiving a parcel of drugs.
2022.08.26	A 19-year-old male student is suspected of purchasing drugs online from Southeast Asian countries, known colloquially as "Good Boy Water" and "Date Rape Drug" (GHB) for delivery to Macao.

Source: Macao daily News

### 3.2 *The Current Status of Macao Adolescent Drug Abuse Prevention Policy*

#### 3.2.1 *"Three reductions" anti-drug policy*

Preventing adolescent drug abuse is an important part of anti-drug efforts. The Macao Special Administrative Region (SAR) government has always placed great emphasis on drug prohibition work, actively implementing policies aimed at reducing supply, demand, and harm, which involve the policy scopes of administration, legal affairs, security, and social culture. The legislative, enforcement, prevention, treatment and judicial work related to drug issues in Macao rely on the cooperation and coordination of various government departments, including the Legal Affairs Bureau, Macao Prison, Judiciary Police, Health Bureau, and Social Work Bureau, to jointly protect social security and the health of citizens. In June 2008, the Macao SAR government established the Narcotics Control Committee<sup>2</sup> with the purpose of assisting in the formulation and implementation of policies, strategies, and plans aimed at combating drugs and drug dependence, and coordinating actions against drugs and drug dependence carried out by Macao SAR public sectors and private institutions through an integrated, cross-departmental, and interdisciplinary approach.

In terms of controlling supply, the Judiciary Police of SAR Government has exclusive investigative authority over drug crimes<sup>3</sup>. The bureau enhances the fight against drug crimes by continuously promoting the improvement of criminal technical identification, strengthening cooperation and investing more resources in personnel technical training in close collaboration with drug enforcement agencies from other countries or regions, aiming to block the source of drugs. The bureau has a Drug Crime Investigation Department dedicated to investigating drug crimes stipulated by current Anti-Drug Law. In terms of intelligence collection, the bureau has a 24-hour reporting center, hotline, fax, and email channels to receive reports from citizens, and has established a cooperative mechanism with police forces in Guangdong, Hong Kong and Macao to enhance intelligence exchange and case investigation, obtaining information on drug crimes through Interpol. Technologically, the bureau has installed X-ray body scanners at major entry and exit ports such as the Macao International Airport and the Outer Harbour Ferry Terminal to severely combat drug trafficking crimes. In terms of police-community interaction, the bureau organizes lectures on drug identification for frontline staff and housekeepers in

<sup>2</sup> Chief Executive's Dispatch of Macao SAR, No. 179/2008, which was published on Official Gazette of the Macao SAR, No. 24, Group 1, on 16th June 2008.

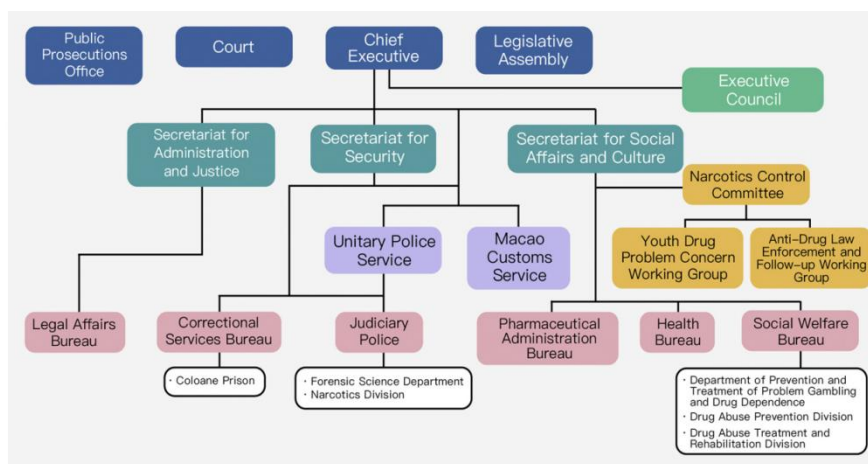
<sup>3</sup> Law No. 5/2006, "Judiciary Police Bureau", as amended by Law No. 14/2020.



entertainment venues and hotels, enhancing the ability of service industry personnel to identify drugs and raising their awareness to proactively report suspected drug crimes to the police.

In terms of policies for reducing demand and harm, the work is primarily carried out by the Department of Prevention and Treatment of Problem Gambling and Drug Dependence under the Social Welfare Bureau of the Macao SAR Government. In reducing demand, efforts are focused on promoting anti-drug propaganda and prevention work, conducting educational activities on drug abuse prevention in schools, families, and communities, including providing lectures, training courses and promotional services for drug prevention, encouraging associations and other groups to participate and carry out drug-related activities, comprehensively promoting informational and educational drug prevention information and materials, as well as offering hotline and reception services. In reducing harm, drug abusers are offered detoxification treatment and rehabilitation services with a working philosophy of “professionalization, systematization, diversification, and popularization”. Through providing community-based outpatient medical care, health checks, drug urine tests, social psychological counseling, family counseling, group work, social reintegration assistance programs and referrals, it aims to provide a comprehensive range of voluntary detoxification treatment plans, maintenance treatment and rehabilitation services for drug abusers in need.

**Figure 2.** Structure Chart of Anti-drug Departments in Macao



### 3.2.2 Establish a “Youth Drug Problem Concern Working Group”

To promote efforts to prevent drug problems among adolescent, the Narcotics Control Committee established the “Youth Drug Problem Concern Working Group” in July 2009. The purpose of the working group is to facilitate communication and cooperation among relevant departments and civil organizations, to jointly promote anti-drug prevention education aimed at youth, and to improve services such as detoxification treatment and rehabilitation. It assesses and studies the effectiveness of Macao's existing regulations, measures and services related to the prevention and treatment of youth drug abuse, and assists the Anti-Drug Committee in formulating strategies and measures for youth drug prohibition.

### 3.2.3 Legal provisions related to drug-related crimes

Drug crimes in Macao are primarily regulated through the current Anti-Drug Law. According to the provisions of Macao's Penal Code, the age of criminal responsibility in Macao is 16. When adolescents commit crimes and reach the age of criminal responsibility, they must be punished in accordance with the provisions of the Anti-Drug Law.

**Table 7. Penalties for drug-related crimes in Macao<sup>4</sup>**

<b>Types of Drug Offenses</b>	<b>Penalties</b>
Possession, acquisition or manufacture of drugs for personal use	Imprisonment from three months to one year, or a fine from 60 days to 240 days
Possession of drug paraphernalia	Imprisonment from three months to one year, or a fine from 60 days to 240 days
Encourage others to take drugs	Imprisonment of one to three years, or fine
Allowing others to manufacture, sell or take drugs in public or gathering places	Two to eight years in prison
Prepare the equipment and materials needed for drug production	Five to fifteen years in prison
Supply, sell, transport or manufacture drugs	Five to fifteen years in prison

Providing, selling, transporting or manufacturing drugs is punishable by up to 15 years in prison. While possessing, obtaining or manufacturing drugs for personal consumption is punishable by up to 1 year in prison or a 240 day fine. Additionally, allowing others to manufacture, sell, or consume drugs in public or at gathering places can be punished by up to 8 years in prison; if you encourage others to take drugs publicly or privately, even if no drugs are provided, it is also a crime and can be sentenced to up to 3 years in prison.

<sup>4</sup> Law No. 17/2009, "Prohibition of Illegal Production, Trafficking, and Consumption of Narcotic and Psychotropic Substances", as amended by Laws No. 4/2014, No. 10/2016, No. 10/2019, No. 22/2020, and No. 10/2021.

In addition, the current Anti-Drug Law and Penal Code of Macao reflect special legal protection for the prevention of drug abuse among adolescents. For example, the acts of selling drugs to minors or providing them for free; instructing individuals under sixteen to sell or transport drugs; and inciting minors to use drugs, for these circumstances, according to relevant laws, the penalties are increased by one-third.

**Table 8.** *special legal protection for the prevention of drug abuse among adolescents in Macao*

<b>Drug crime situation</b>	<b>penalty</b>
Selling drugs to minors	According to the provisions of the current Anti-Drug Law, the penalty will be increased by one-third, which means that it can be sentenced to up to twenty years in prison.
Distribute and provide free drugs to minors	According to the provisions of the current Anti-Drug Law, the penalty will be increased by one-third, which means that it can be sentenced to up to twenty years in prison.
Instructing non-responsible persons (under 16 years of age and mentally disturbed persons) to sell drugs or transport drugs	According to the provisions of the Penal Code, the penalty will be increased by one-third, which means that it can be sentenced to up to twenty years in prison.
Encourage minors to take drugs	Under current Anti-Drug Law, the penalty will be increased by one-third, which means that it can be sentenced to up to four years in prison.

For adolescent aged between 12 to 16 who have not reached the age of criminal responsibility, Law No. 2/2007 “Education and Supervision System for Juvenile Offenders” governs their cases. The maximum sentence can be admission to a juvenile reformatory. For juvenile offenders under the age of 12, the general measures of the “Social Protection System” stipulated by Decree-Law No. 65/99/M are applicable, including the option to entrust the juvenile to a children's institutions. Hence, it is clear that individuals of any age who commit crimes must bear responsibility.

**Table 9.** *Criminal responsibility for adolescents aged between 12 to 16*

<b>Laws and regulations</b>	<b>Decree-Law No. 65/99/M</b>	<b>Law No. 2/2007</b>
System	" Social Protection System"	" Education and Supervision System for Juvenile Offenders"
Applicable Age	Under 12 years old	Between 12 and 16 years old

Additionally, the provisions of the Penal Code are supplementary to the crimes specified in the current Anti-Drug Law. In terms of administrative permissions and regulations, Decree-Law No. 34/99/M of the Macao SAR, "Regulations on the Sale and Legal Use of Narcotics and Psychotropic Substances" is established to oversee the legal market operations of narcotics and psychotropic substances. For example, pharmacies are not allowed to sell controlled drugs to minors, and violators can be fined up to 50,000 Macao Patacas.

### *3.3 Problems existing in Macao's adolescent drug abuse prevention policies*

After analyzing the current situation, characteristics and trends of adolescent drug use in Macao, and conducting a comprehensive review of the status of drug abuse prevention among Macao's youth, the difficulties and problems existing in the implementation of adolescent drug abuse prevention work in Macao are summarized as follows:

#### *3.3.1 Changes in social structural patterns have weakened the protective function of families*

According to the social control theory proposed by American criminologist Hirschi (1969), the connection between adolescents and their parents is the first attachment relationship they establish. When the bond with parents is weak, the possibility of committing crimes significantly increases. With the development of society and economy, the employment rate of women has increased, making dual-career families common. Among the employed population, one-third are engaged in tourism and gambling-related industries. Most of these industries work long hours or require shifts. Once parental supervision of teenagers is insufficient, it becomes easy for them to make the wrong friends and engage in criminal or deviant behavior. At the same time, due to factors such as the structure of social industries and family patterns, drug control departments face various levels of difficulty in carrying out anti-drug propaganda work to parents. When parents lack knowledge in drug prevention, they will be helpless when their children engage in drug use, or even fail to recognize their children's drug abuse behavior, causing the issue of youth drug abuse to continue to worsen.

#### *3.3.2 Drug distribution channels extend to the internet*

Socialization is the process in which individuals learn and internalize appropriate attitudes, values and behaviors in order to become responsible and participatory social beings. Adolescence is a critical period for socialization. In the past, families and schools were the main socialization subjects for adolescents, that is, the objects of learning and imitation; however, in the age of the internet, the network has gradually replaced the traditional socialization subject function. In the process of socialization of adolescents, they are affected by the internet and the impact of new media is particularly obvious. As drug distribution channels continue to extend to the internet, the spread of harmful drug information online, misleading reports about adolescents using drugs, and online platforms for purchasing drugs pose new challenges to the formation of anti-drug values among adolescents.

### *3.3.3 The decentralized anti-drug mechanism is not conducive to the effectiveness of policy implementation*

Macao's anti-drug mechanism is an umbrella-type structure, operated in coordination by multiple government departments. The Judiciary Police, the Social Welfare Bureau and the Legal Affairs Bureau, among other drug-related departments, carry out the work of preventing youth drug crimes according to their respective functions. However, the orientations of drug prevention campaigns carried out by different professionals vary. For example, as a law enforcement agency, the police department treats drug crimes as public offenses. When the police become aware of drug crimes, they will proactively intervene and follow up with investigations. As a result, the drug crime prevention propaganda conducted by the police tends to lean towards law enforcement and criminal responsibility, encouraging the public to bravely report to the police. On the other hand, for social workers, the main focus of their advocacy is to guide youth in establishing good life patterns, to seek help in time when facing drug problems and to accept professional treatment. The differing promotional orientations can cause confusion for youth when they receive messages from different perspectives. They wonder whether to report or seek help first when facing drug problems. Moreover, when youth drug abusers learn about the legal consequences of drug crimes, the fear of being held criminally responsible may decrease their willingness to seek help proactively.

In addition, different anti-drug departments have set up various hotlines for their services. The police reporting hotline operates continuously, while other drug control department consultation hotlines are only available during office hours. When adolescents face drug issues, they need to inquire about the consultation hotlines of each unit separately to understand the situation, making it difficult to ensure that they can receive timely and appropriate assistance when encountering drug problems.

**Table 10.** *Various hotlines from different anti-drug departments in Macao*

<b>Service</b>	<b>Anti-drug departments</b>	<b>Hotline</b>	<b>Service hours</b>
Drug prevention	Social Welfare Bureau	2878 1791	Office hours
Drug information	Health Bureau	2831 3731	Office hours
Legal inquiries	Legal Affairs Bureau	8987 2233	Office hours
Drug crime reporting	Judicial Police	2883 3777	24 hours

On the other hand, the members of the Narcotics Control Committee and its subordinate Youth Drug Problem Concern Working Group are led or managed by public sector leaders, community leaders and individuals recognized as outstanding in the relevant fields. As the committee members also hold important positions, it is difficult for them to fully commit to anti-drug affairs. In addition, the committee serves as a consultative organization, responsible for collecting opinions from all sectors of society to promote related work, but the decision-making power is still dispersed among the various executive departments. Therefore, the supervisory role played by the related working group is relatively limited.

### *3.3.4 Drug crimes carry lighter penalties*

Rational Choice Theory (Cornish & Clarke, 1986) believe that when criminals consider whether to engage in criminal behavior, they will weigh the benefits, risks and costs of committing a crime. When the benefits exceed the risks plus costs, they tend to commit the crime. In Macao, drug crimes carry relatively lower penalties compared to neighboring regions. According to the current Anti-Drug Law, drug trafficking can result in a sentence of five to fifteen years' imprisonment, while drug use can lead to three months to one year's imprisonment, or a fine of sixty to two hundred and forty days, which is far lower than in neighboring regions. For instance, Hong Kong and mainland China impose severe penalties for drug crimes. In Hong Kong, the maximum penalty for serious offenses such as trafficking and manufacturing dangerous drugs is life imprisonment and a fine of 5 million dollars, while drug users can be fined up to 1 million dollars and imprisoned for up to 7 years. In Mainland China, the maximum penalty for drug trafficking can be the death penalty, while drug users are subject to administrative penalties according to the law. Due to the low cost of drug crimes in Macao, it is often used as a transit point by international drug trafficking syndicates, making Macao a target for criminals as a drug crime haven. Additionally, in terms of drug treatment, Macao implements voluntary drug rehabilitation, which reduces the severity and seriousness of the penalties. In contrast, both Hong Kong and mainland China implement a compulsory drug rehabilitation model to increase the severity of punishments in the fight against drug crimes.

### *3.3.5 The concealment of drug use and trafficking has increased the difficulty of law enforcement*

Routine Activity Theory (Cohen & Felson, 1979) states that when three elements are present: motivated offenders, suitable targets and the absence of capable guardians, the opportunity for crime increases. Given that the types of drugs used by adolescents, methods of consumption, locations, purchasing methods and symptoms after drug use are all becoming more covert, cross-border and internet-based, it has become more difficult for relevant anti-drug departments to detect and reach out to youth involved in drug use, thus hindering effective monitoring of the problem. Furthermore, the ever-changing variety of new types of drugs, with traffickers attempting to alter the chemical structure of controlled substances to evade law enforcement oversight, has increased the challenge of preventing youth involvement in drug-related crimes.

## **4. Discussion**

Based on the above analysis, preventing adolescent drug abuse involves a multi-faceted governance approach, including individuals, families, schools, society, enterprises and both public and private sector units or organizations. The traditional government-centered management model can no longer meet the needs of social development. The social governance theory proposed by N. Rosenau can provide guidance for perfecting public policies aimed at preventing adolescent drug abuse. This theory advocates for government-led initiatives to promote collaborative participation from all sectors of society, jointly addressing public issues and achieving policy goals, in pursuit of maximizing the public interest.

Currently, public policies for preventing adolescent drug abuse have developed quite maturely at the school and community levels. For example, through the implementation of healthy living education and the organization of various anti-drug activities, anti-drug messages are conveyed to schools and communities. The police force is also committed to preventing and combating drug crimes in order to create drug-free communities. In the future, to address the issue of the concealment of drug crimes, related policies could be further optimized based on existing foundations, taking into account family, enterprise, and technological aspects.

### *4.1 Promote the development of anti-drug education in a family-oriented direction*

In response to the concealment of adolescent drug abuse, parents are the first line of defense in preventing their children from using drugs. Therefore, it can be considered to integrate anti-drug information into family and parenting education, to enhance parents' ability to recognize whether their children are using or trafficking drugs, as well as skills to prevent their children from committing drug-related crimes, thus improving the protective function for adolescents. At the same time, in response to the needs of society and the requirements of dual-career families, enterprises can be encouraged to fulfill their social responsibilities. This includes promoting government and corporate cooperation, where government departments proactively enter enterprises to educate employees on family and parent-child education, especially intensifying the dissemination of anti-drug messages to employees in the hotel, entertainment, gaming industries and providing convenient avenues for assistance.

#### *4.2 Fully leverage the power of the internet and enhance precise drug prevention through technology*

In the era of the internet, adolescents commonly use the web and new media to receive information, engage in social interactions and express their personal views. Therefore, it's feasible to fully utilize the new media platforms they frequently use to present them with anti-drug propaganda and healthy living education content. This approach can also extend the reach of these anti-drug messages to youth groups outside the education system. On the other hand, through the application of artificial intelligence systems and big data technology, it is possible to precisely identify and screen special and key populations, and to carry out targeted prevention and education for the youth group. For example, the "Project RADAR II - Counseling Program for Concealed Drug Use and Drug Crime Offenses" implemented by the Hong Kong Federation of Youth Groups' Centre for Youth Crime Prevention, by collaborating with technology companies, analyzes social media users' thoughts on drugs and reasons for drug use, thereby formulating targeted anti-drug education strategies, thus precisely preventing drug abuse with the support of technology.

#### *4.3 Further improve the drug prevention mechanism and establish a dedicated channel for assistance*

Firstly, it is necessary to integrate resources and coordinate collaboration. Strengthen the coordination function of the "Youth Drug Problem Concern Working Group" under the Narcotics Control Committee, by integrating resources to provide systematic anti-drug propaganda efforts to youth, reducing the overlap of resources and inconsistency of positions in the implementation process, thus maximizing the effectiveness of resources.

Secondly, a dedicated anti-drug consultation hotline that is different from the current one must be set up. For example, Hong Kong's anti-drug hotline "186 186" and other easy-to-understand special numbers are set up as a 24-hour emergency hotline so that families or individuals in need of help can get the first step of consultation and assistance from a single window. At the same time, after expert assessment, the case will be referred to the appropriate department for follow-up. On the one hand, it can unblock reporting channels, unify the reported problems and then construct methods to deal with commonly encountered problems, so that help seekers can receive immediate and effective consultation on drug problems.

#### *4.4 Increase the penalties for drug-related crimes and combat the source of drug trafficking*

From the perspective of preventing drug abuse among adolescents, it is necessary to enhance the penalties for trafficking, transporting and manufacturing drugs, in order to reduce the supply of drugs in the market and thereby lowering the risk of adolescents coming into contact with drugs. Society should collectively discuss and reach a consensus, re-evaluating the necessity of compulsory rehabilitation. For instance, establishing a phased rehabilitation model, if voluntary rehabilitation does not show effectiveness within a certain period, then transitioning to compulsory rehabilitation to strengthen the effects of treatment and deterrence.

#### *4.5 Promote multi-party cooperation and establish an interconnected intelligence and information system*



Regarding the issue of adolescent drug abuse becoming cross-border, it is suggested to establish an interconnected intelligence information system for the mobile population of youths in Guangdong, Hong Kong, and Macao through a regional police cooperation mechanism. This system would capture data on the mobile youth population, timely report the latest developments in cross-border drug crimes involving youth, including case types, reasons for committing crimes, and personal backgrounds, thereby monitoring the characteristics and trends of youth drug abuse abroad. This system provides a valuable basis for formulating related policies in the future. Additionally, by establishing a referral mechanism with relevant drug rehabilitation departments, drug-using youths can be connected to a network of drug treatment services.

## 5. Conclusion

Preventing adolescent drug abuse is a social system project that requires the coordination of multiple parties. Government resources are limited, but civilian power is infinite. To effectively solve the problem of adolescent drug abuse, it is necessary to continuously monitor the characteristics and trends of youth drug crimes, understand the causes behind their drug use behavior and constantly improve relevant prevention policies based on existing foundations. Through the joint efforts and collective wisdom of multiple parties, we must work together to build a drug-free environment conducive to the healthy growth of youth.

### **Authors' Contribution:**

Use this section to provide a statement on the work that each of the enlisted authors has contributed to this manuscript. Author's contribution can be listed using the provided responsibilities below, through putting authors' name after each role.

*Conceptualization:* Lok Cheng

*Data Collection:* Lok Cheng

*Data Analysis:* Lok Cheng

*Manuscript Writing:* Lok Cheng

*Manuscript Reviewing and Editing:* Lok Cheng

\*All authors have read and agree to the final version of the manuscript that will be published. Authorship should be limited to those who have contributed substantially to the work of this manuscript.

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Data can be obtained by contacting the corresponding author, refer to Central Registration System for Drug Abusers of Macao ([https://www.antidrugs.gov.mo/mo\\_commit\\_ent/register/](https://www.antidrugs.gov.mo/mo_commit_ent/register/)), Judiciary Police of the Macao Special Administrative Region Government website

([https://www.pj.gov.mo/Web/Policia/index\\_en.html](https://www.pj.gov.mo/Web/Policia/index_en.html)), Macao Anti-Drugs Website (<https://www.antidrugs.gov.mo/en/>) and Macao daily News (<http://www.macaodaily.com/>)

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The author declares no conflict of interest.

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