The Bidirectional Flow Model of New Psychoactive Substance and Legal Responses in China

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Abstract

Introduction The whole world has witnessed a huge increase in New Psychoactive Substances abuse and related crimes in recent years, and close connections between different drug markets in different countries have been built. As a chemical production country, with insufficient regulation on the precursor chemicals, China has been regarded as a main source of precursor chemicals and New Psychoactive Substances. Hence, what is the relationship between China and other countries on the circulation of precursor chemicals and New Psychoactive Substances? What role does China play in the increase of New Psychoactive Substances manufacture and smuggling worldwide?

Method To answer these research questions, secondary data will be collected which comprise seizures, trend, reasons involving precursor chemicals and New Psychoactive Substances. Result As a chemical production country, China has many deficiencies in preventing and controlling New Psychoactive Substances crimes in legal measures, especially in the regulation on precursor chemicals. The circulation of precursor chemicals and New Psychoactive Substances between China and other countries has been developed into a Bidirectional Flow Model. Both Bidirectional Flow Model and the lack of legal responses in China contribute to the expansion of psychoactive substances manufacture and smuggling in worldwide markets, making it intensively difficult for supply reduction in precursor chemicals as well as New Psychoactive Substances in China and other countries. Conclusion The strengthened Bidirectional Flow Model, the insufficient legislation and less cooperation provide a cradle for the development of New Psychoactive Substances and the increase of related crimes, making it an urgent need for innovative legislation in China and close cooperation between China and other countries.

Keywords: Bidirectional Flow Model New Psychoactive Substances Precursor Chemicals Legal Responses

1. Introduction

New Psychoactive Substance(NPS) is more and more popular both in drug markets and related crimes. The number of NPSs has increased substantially in recent years, and a total of 541 types of NPSs have been reported by 95 countries and territories by December 2014(UNODC, 2015).The sheer number, diversity and transient nature of NPSs not only challenge the capacity, credibility of national identification, risk assessment, but also make it
difficult for legislation to keep pace with the substantial increasing in the swift replacement, production and distribution. Many attempts have been made to discover a high-efficiency legislation model to control NPSs abuse and related crimes. There have been endeavors to explore an innovation path to decrease the supply of NPSs, which specifically focus on Analogue Law and Generic Law. Meanwhile a large number of studies have been devoted to the toxicity, chemical structure and other micro fields.

Despite the importance of controlling and weakening the supply of NPSs, scarce attention has been paid to the production and distribution from a macro perspective. Unlike the supply of tradition drugs, NPSs purveying are not restricted to the factors such as geography, long production cycle, vegetal materials, because of the production technology, development of Internet and globalization. Thus, it is far from enough for a country to try to decrease the NPSs abuse and related crimes by relying on supply-reduction measures in its own territory. Extensive coverage of the main consuming markets and production markets are needed urgently from a wide perspective, which should include Europe, China and South Asia.

Considering how to address these concerns, this paper seeks to explore and explain the dynamic and interactive connections between different NPSs markets. More attention will be paid to the role that China plays in stimulating the increase of NPSs, because of the considerable chemical industries and the scant scrutiny and legislation. By identifying these problems, I hope to both further the analytic discussion of NPSs supply-reduction and provide a comprehensive theory for policy maker and future research.

2. Formulation and Development of Bidirectional Flow Model of NPSs

2.1 Precursor Chemicals and NPSs in China

The relationships among precursor chemicals, NPSs and related crimes are complicated and the causality has not been confirmed yet. However, a positive correlation between them is obvious. The sharply increase in seizure of frequency and quality of NPSs is not only a strong signal of increased supply(Wan, 2016), but also a powerful proof which reveals the similar tendency of related crimes. Meanwhile, precursor chemicals are used widely in chemical process industries, agricultural production and scientific research, and play an significant role in the process of drug manufacture as well. “No precursor chemicals, no drugs ” has been a consensus worldwide(Qiu, 2006).

The increasing tendency in amount and type of precursor chemicals indeed reflects the booming NPSs markets in China. Although Chinese government did not figure out how many kinds of psychoactive substances have
appeared in domestic, the increase of NPSs production can be confirmed from the proportion of drug seizures (Chart 1). As shown in chart 1, the amount of methamphetamine and ketamine seizures have increased dramatically, and only these two types of NPSs seizures exceeded fifty percent, which means the proportion of NPSs is much more higher in drug markets. There may be a doubt that the proportion of seizures does not represent the fact of whole drug market in China. However, this incertitude can be abated by the number of NPSs abusers. The population of NPSs abusers has been increasing for these years, exceeding the tradition drug abusers (Table 1). The number of NPSs abusers and the amount of NPSs seizures have provide a persuasive evidence in different angles for us to have a clear understanding of the changes in drug markets in which the NPSs may have a dominated position and will be more prevalent. This speculation is reasonable not only because of the fact of NPSs abusers and related crimes, but also based on the characteristics of NPSs. On the one hand, the high profits, low-cost and easy process of production give these substances more advantages than tradition drugs; On the other hand, the lack of legislation and monitoring provide a “great room” for the development of NPSs production. For instance, about 3000 policemen surrounded the Boshe Village(博社村) in Guangdong province that was famous for NPSs production, and arrested 180 suspects and captured 3000 Kg methamphetamines and 23000 Kg precursor chemicals. The small village had been known as a NPS production factory since 1999, but the government did not take any effective action until December 2013.

Chart 1

*the ketamine seizures in 2011 is not mentioned in the government report, but it can be find in an conference report which located at the website: http://www.chinesemission-vienna.at/chn/zxxx/t915363.htm.*
Table 1

<table>
<thead>
<tr>
<th>types</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradition drug abusers</td>
<td>69%</td>
<td>64.5%</td>
<td>59.3%</td>
<td>53.6%</td>
<td>49.3%</td>
</tr>
<tr>
<td>NPSs abusers</td>
<td>28%</td>
<td>32.7%</td>
<td>38%</td>
<td>42.6%</td>
<td>49.4%</td>
</tr>
</tbody>
</table>

*Drug abusers percentage in 5 years. Data sources: China's drug situation reports 2014.

In addition, the increase in precursor chemicals and NPSs related crimes is not only because of the lack of monitoring, but also facilitated by globalization, modern technical support in production and the development of internet. All these factors connect different markets worldwide together and provide much more convenient way in communication and transportation, making these crimes difficult to be detected by police. The precursor chemicals crimes in China have been developed for a long time and have the following characteristics: Firstly, large amount in single case and variety of types of illegal chemicals. For example, the precursor chemicals seizures increased sharply from 649.1 ton to 5740.08 ton in 5 years (Chart2). This characteristic can also be found in single case, such as in XiangYue2012-337 case (湘粤2012-337号案件), the police arrested 11 suspects, involving Mexico, Hong Kong and mainland, and captured 1.12 ton methamphetamines and 19.8 ton different kinds of precursor chemicals (China, 2013). Secondly, smuggling is much more deceptive, and hard detection, such as online shops, deceptive packaging and express transportation. Some Chinese enterprises have registered as legal companies, including medicine production companies and chemical companies, legally produce precursor chemicals in appearance while getting into the business of smuggling their products for NPSs manufacturers in fact. For instance, at the beginning of 2014, Dutch authorities reported a 15Kg seizures of N-Acetylmephedrone which is an original material for mephedrone. The consignment, which was falsely declared as another chemical, originated from an import-export company registered in Hong Kong and was destined for a business registered in the Netherlands. (EMCDDA, 2014) Thirdly, the private cooperation between internal producer and external producer makes it more difficult to track the suspects and solve the cases completely.
2.2 Rudiment and Development of Bidirectional Flow Model

As a result of the expansion of NPSs and related crimes both in China and other countries, circulation of precursor chemicals and NPSs between different producing and consuming markets can be summarized and confirmed from the cases solved in recent years, and the interactive connection has brought challenges to NPSs preventing and controlling system (Qin, 2006). With the strengthening of this relationship, it is obvious that “Bidirectional Flow Model (BFM)” has been established and strengthened in different markets especially among China, south Asia and Europe.

BFM is based on the basic economic model: supply-demand relationship, which means the demands for NPSs both in China and international markets have a great positive effect on the supply of precursor chemicals and NPSs, involving trafficking and producing, and lead to a vicious circle. The precursor chemicals in China have been used for NPSs manufactures both in domestic and overseas, and close connections have been built between internal and foreign drug markets, especially the district of East Asia, South-East Asia and European. In the model, the first flow direction is precursor chemicals distribution in China, which involves two routes: 1) being transported into some chemical labs and personal workshops in domestic; 2) smuggling to south Asia, European and other districts by some chemical enterprises and criminal organizations. The main aim of illegal distribution of precursor chemicals is to produce kinds of NPSs which are supplied to domestic and international producing markets. The second stage is the distribution of NPSs, which includes an internal supply and cross-supply. It is obvious that
there is a positive interaction between Part 1 and Part 2: on the one hand, the foreign markets attract the smuggling of precursor chemicals and the production of NPSs; on the other hand, the consumption markets in China encourage more NPSs flowing into China.

With the development of this model, some producing areas around China have been confirmed: (1) Golden Triangle, mainly produce methamphetamine, especially methamphetamine tablet; (2) South-East Asia, mainly produce MDMA, Ketamine and ecstasy type stimulate; (3) Korean Peninsula and Japan: mainly produce crystalline methamphetamine and methamphetamine tablet. The circulation of precursor chemicals between China and these areas is a strong foundation for the NPSs production and smuggling, and also has a great effect on the expansion of NPSs crimes as well. These flow routes have been objective facts, which can be supported by lots of judicial cases (China, 2014).

**Chart 3**

*Note: these arrows represent the flows direction of precursor chemicals and are not an indication of quantity trafficking.*

### 2.3 Influence of BFM: Significant Interaction of NPS Crimes Between China and other Countries

With the development of BFM, the dynamic interaction in this model spontaneously stimulates the increased supply of NPSs. Hence, China is not isolated from the rest of world, but plays an important role involving NPSs supply-reduction. Considerable NPSs flow from China to the world, including Europe and south-east Asia. As can be seen in Chart 4, although worldwide methamphetamine seizures have a fluctuation, but an ever-increasing of seizures in China can be confirmed which have been a huge proportion in the worldwide drug markets in recent years.
As noted before, China has been reported by EU member states as a main source of precursor chemicals delivered illegally to Europe in the form of bulk powder or herbal substance (EMCDDA, 2014). Meanwhile the strengthened BFM makes this situation much worse. Most NPSs appearing on the European drug markets were produced in underground laboratories or sourced from diverted medicines and sold directly on the illicit drug markets, and these substances, often produced in China and India, are now imported into Europe. The easy availability and less cost of uncontrolled precursor chemicals and the falling availability of MDMA may have encouraged NPSs manufacturers and dealers to consider other ecstatic compounds, which could be used both as substitutes for MDMA in ecstasy pills and also for sale in their own right. This shift in what is being produced has been accompanied by a shift in the location of manufacture from Europe to other regions, notably South East Asia and the burgeoning economies of India and China with relatively poorly regulated control mechanisms (Adam, 2011). Chinese government also realized that Europe has been a great consumption market for NPSs, which stimulated the production and trafficking of NPSs in domestic (China, 2015). The increasing NPSs trafficking cases solved in China in recent years are not just reflections of BFM, but also results of the development of BFM.

Chart 4

The same connections between China and other Asian countries are much closer than Europe, especially with Myanmar, Vietnam, Korea and Japan. Geographic factor makes NPSs production and distribution much cheaper and more convenient between China and Asian countries. As a frontier province, connecting China and some other Asian countries, Yunnan has witnessed the increasing number of precursor chemicals and NPSs crimes in recent years. A huge increasing trend in cross-supply of NPSs can be found between China and north Myanmar, and 95.2% methamphetamine tablets seizures in Yunnan province came from adjoining area Northern Myanmar, according to the national drug laboratory sample analysis. Thus, methamphetamine tablets from Northern Myanmar had
replaced heroin in China, becoming the most influential drug. For example there were 9.7 tons methamphetamine tablets seizures in 2013, increasing 8% compared with 2012. Meanwhile, the smuggling cases solved increased from 165 to 2282 from 2006 and 2014 between China and Vietnam, involving 2664 drug-related suspects (15 Vietnamese suspects), 152.9 kg heroin, 356.8 kg methamphetamine tablets and 259.5 kg ketamine. Korea and Japan are also main consuming markets which stimulated the trafficking of NPS especially in Northern provinces of China. The huge amount of seizures of NPSs, no matter in whole world or in specific cases, reflected that the production and distribution of NPSs were not controlled strictly and effectively. Some countries and districts have focused on law enforcement to regular NPSs crimes and abuse, but all of these legislations seem to be ineffectual.

3. Legal Response in China

Generally if we can define a new psychoactive substance as a kind of drug, the criminal law and Judicial Interpretations in China will have a system on the penalty and constitution of crimes. However the Criminal Law was enacted mainly focusing on tradition drugs, based on the historical circumstance, tradition drug crimes, drug markets etc.. It is reasonable that the legislators cannot expect the great changes no matter in drug market or drug crimes. Hysteresis quality and certain characteristics of law can also explain why criminal law is so embarrassing when confronting with NPSs crimes. Comparing with tradition drugs, although the toxicities of some new drugs still keep unknown, it is obvious that the danger caused by NPSs to health and social order is much less than tradition drugs, generalized from the death figure including tradition drugs and new drugs(Wei, 2013). If the existing law system does not distinguish the difference between NPSs and tradition drugs on the constitution and penalty, it must go against towards the principle of suiting punishment to crime. For instance, smuggling, trafficking, manufacturing more than 1 kilogram of opium , more than 50 grams heroin or methamphetamine or other large amount of narcotic drugs, the penalty is at least 15 years sentence, life sentence or death(Article 347, Criminal Law). It is clear that the articles in Criminal Law only involved 3 kinds of drugs, but there are at least 541 types of NPSs in the drug market(UNODC, 2015), how to define the NPS as a kind of drug and make it included in the scope of control is too difficult for criminal law.

With the increasing rate of NPSs crimes, Chinese government noticed that it was not enough to control NPSs crimes only relying on severe punishment. China enacted 17 administrative regulations and divisional regulations during 2005-2006, such as Regulations for Administration of Precursors Chemicals used in Production of Narcotic Drugs and Psychotropic Substances(2005), Provisions on the Management of Import and Export of Precursor Chemicals(2006) etc.. These laws were enacted quickly during 2 years, without sufficient data support, lack of
adequate theoretical foundation, causing lots of conflicts and problems not only in the prevention of NPSs crimes but also in theoretical research. Regulations on Precursor and Chemicals is the most important law among these regulations because its legal hierarchy is the highest, others should in comply with it. However, only 23 kinds of precursor chemicals are included in this regulation, which gives various possibilities for NPSs producers to use an uncontrolled precursor chemical as a substitution for NPS manufacture.

4. Conclusion

The increasing trend of NPSs abuse and crimes in China has a great stimulating effect on the expanding of NPSs in worldwide drug markets. Many international law enforcement agencies believe that large-scale methamphetamine producers in other Asian countries and EU member states use Chinese-produced ephedrine and pseudoephedrine as raw materials. And diverted Chinese precursor chemicals may sustain synthetic drug production in other countries as far away as Mexico, Belgium, Indonesia, and the Netherlands. Although China has enacted some administration regulations to control precursor chemicals since November 2005 and engaged in multilateral and bilateral efforts to prevent diversion from its chemical production industries to other countries, but the effects of legislation measures still keep unknown.

Worldwide issues need worldwide attentions and cooperation. All the countries should take their responsibilities and strain every nerve to make efforts, based on their domestic situation to innovate legal measures or improve current legislation more practical and effective. However, it is unscientific and impossible to control and decrease NPSs crimes just relying on an isolated country, which means mutual monitoring systems between consumption and production markets in different countries are indispensable. EU has set a good example in terms of monitoring system, for example, the Council decision 2005/387/JHA of 10 May 2005 on the information exchange, risk assessment and control of NPSs, established a mechanism for information exchange on NPSs in EU member states. If this system can be developed as a mutual and long term mechanism worldwide, It will be a benign tracking mechanism between consumption and production markets, which means once a new type of NPSs is detected, then this information will be shared worldwide, and some chemical production countries like China and India can make direct legal responses to the precursor chemicals used producing NPSs.

As for China, the chaos on defining the NPSs in theoretical research, lower hierarchy and short-term regulations are shortcomings of Chinese legal system when confronting with NPSs crimes. Considering the vital role that China plays in controlling NPSs supply and related crimes, solving these problems should be put on the agenda initially.
Bibliography


