

## Risk Behavior of Adolescents in Using Amphetamine Drug in the Upper Northern Region : Quantitative and Qualitative Studies

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### ABSTRACT

*This study was divided into 2 methods (quantitative and qualitative). Data for a quantitative study were from samplings of Mathayom 1, 2 and 3 students, totaling 6,457 respondents. They were from stratified random sampling in 8 provinces of the Upper Northern region. The findings of the study revealed that most of the samplings were male (54.58%), 14- year- old (34.44%), studying outside the city (57.58%), having affectionate parenting styles (67.98%), income was not enough for expenditure (43.01%) and smoking cigarettes at the school (52.6%). Most samplings had high risk level in using amphetamine in a factor related to receiving information about amphetamine. Factors of gender, school location, age and educational level affected risk behavior level differently in a statistically-significant manner. Moreover, the study also found out that factors of family economic status, education level of father and mother, parenting in neglecting style and democratic type had statistically-significant relationship with risk level of adolescents in using amphetamine.*

*As for a qualitative study, data were collected from Mathayom 1, 2 and 3 students, homeroom teachers and school administrators, totaling 278 respondents. These were from purposive sampling, and the data were collected by focus group discussion and in-depth interview in secondary schools in 8 provinces of the Upper Northern region. The results of the study revealed that most adolescents had two paradigms of attitudes towards using amphetamine, that is, they had a negative attitude towards amphetamine and they found that popularity of using amphetamine had changed. As for a process in initiating risk behavior in using drug, it was found that most adolescents began to have risk behavior from 3 conditions: personal condition, family condition and friend condition. As for general risk level, adolescents demonstrated behavior which violated school's regulations and stayed outside their homes but not yet involved with drug. In amphetamine risk level, most adolescents involved with basic addicted substances, especially tobacco and alcoholic drinks, and clearly demonstrated more negative behavior against school's regulations. The findings also revealed that factors of geography, northern culture, community strength, mass media, friends and stress were all important factors causing amphetamine risk behavior of adolescents in the Upper Northern region. Moreover, it was found out that the*

*situation of amphetamine spread in the Upper Northern region had decreased to 0–1%. However, adolescents still involved with other addicted substances, i.e., inhalants, cannabis and mixed cough syrup. Although the spread of these substances had reduced, the present situation showed that adolescents still had 3 problems in their behavior: using of basic addicted substances, i.e., tobacco and liquor especially local spirit which were cheap and easy to buy; sexual problem reflecting deterioration of Thai culture; and lastly, violence found in adolescents (quarrelling and being aggressive).*

*As for drug monitoring in schools in the Upper Northern region, this consisted of two components: monitoring within school compounds and monitoring outside schools. In school compound monitoring, organizational leaders' roles were stressed. Students taking-care system of Ministry of Education had been used. Staffing structure was positioned to prevent and solve the drug problem. Psychological knowledge was applied to solve adolescents' problems. Teachers' devotion, student inspectors and strict punishment were all applied to help solve the problem. As for monitoring outside schools, community and parent-student cooperation was used to prevent and reduce risk for school staff directly involving with drug prevention task.*

**Key words:** Risk behavior, Amphetamine drug, the Upper Northern region

## INTRODUCTION

Drug trafficking is a worldwide problem that affects national security. Thailand, in particular, due to her geographic location and supported by related conditions, is a convenient place for smuggling drug into the country, as shown by statistics on drug trafficking arrests. However, during the past five years (from 2001–2005), amphetamine has been the addicted substance which was ranked first in being caught nationwide (Bureau of Narcotics Suppression Board, 2005). Rate of its spread had been fast and it has been widely distributed to adolescents in schools. Thus, the government had implemented a serious policy in prevention and suppression of drug smuggling in order to solve drug-related problems. Nevertheless, the areas in northern part of Thailand are still the location where most amphetamine has been smuggled into country (89%) (Thairat, 2005) comparing to other areas of Thailand. Therefore, the research team aimed to study the factors related to the risk behavior of amphetamine using of adolescents in the Upper Northern region.

## OBJECTIVES

This research has the following aims:

1. To find out the level of risk behavior of adolescents in using amphetamine drugs in the Upper Northern region
2. To determine the differences of risk behavior of adolescents in using amphetamine drugs in the Upper Northern region
3. To investigate factors relating to risk behavior of adolescents in using amphetamine drugs in the Upper Northern region
4. To find out the adolescents' viewpoints towards amphetamine drugs
5. To investigate risk behavior process of adolescents in using amphetamine drugs in

the Upper Northern region

6. To find out factors causing the risk behavior of adolescents in using amphetamine drugs in the Upper Northern region

7. To determine the situation of amphetamine spread and the security monitoring from the schools in the Upper Northern region

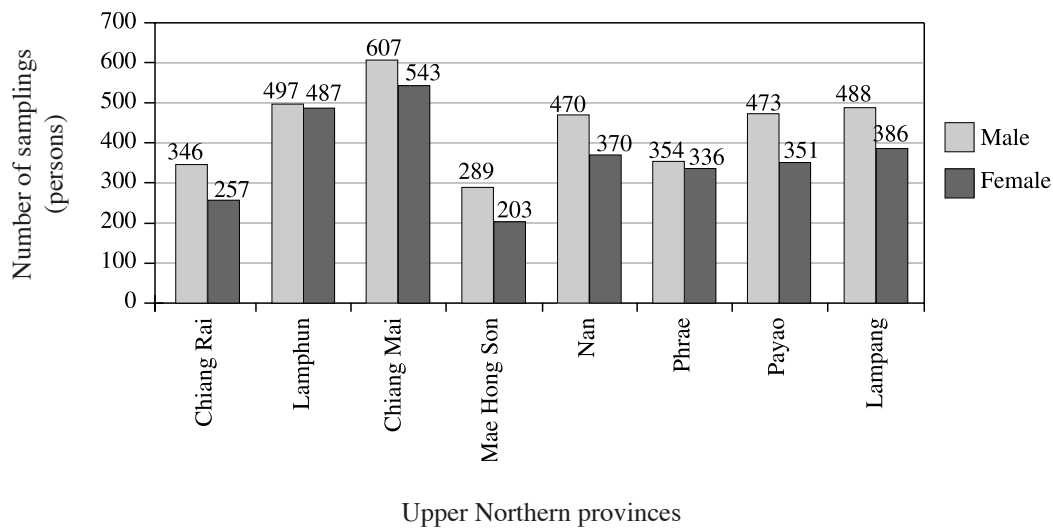
### METHODOLOGY (QUANTITATIVE RESEARCH)

This study used the sampling groups of Mathayom 1, 2 and 3 students in the schools in 8 provinces of the Upper Northern region (Chiang Rai, Lamphun, Chiang Mai, Mae Hong Son, Nan, Phrae, Phayao and Lampang). The selected students came from stratified random sampling totaling 6,457 respondents. The instrument used for this research was the questionnaire measuring risk behavior in 9 aspects which had reliability point at 0.92. As for statistical analysis, t-test, F-test, Least Significant Difference (LSD) and chi-square ( $\chi^2$ -test) were used.

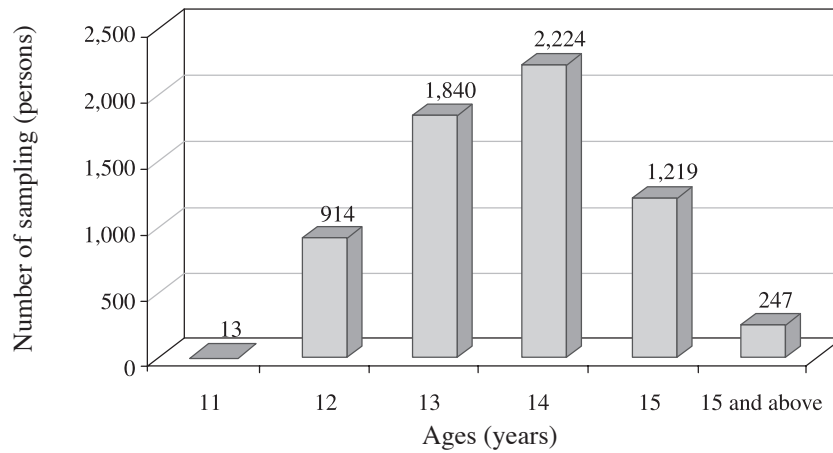
### RESULTS AND DISCUSSION

#### Part 1 : General information

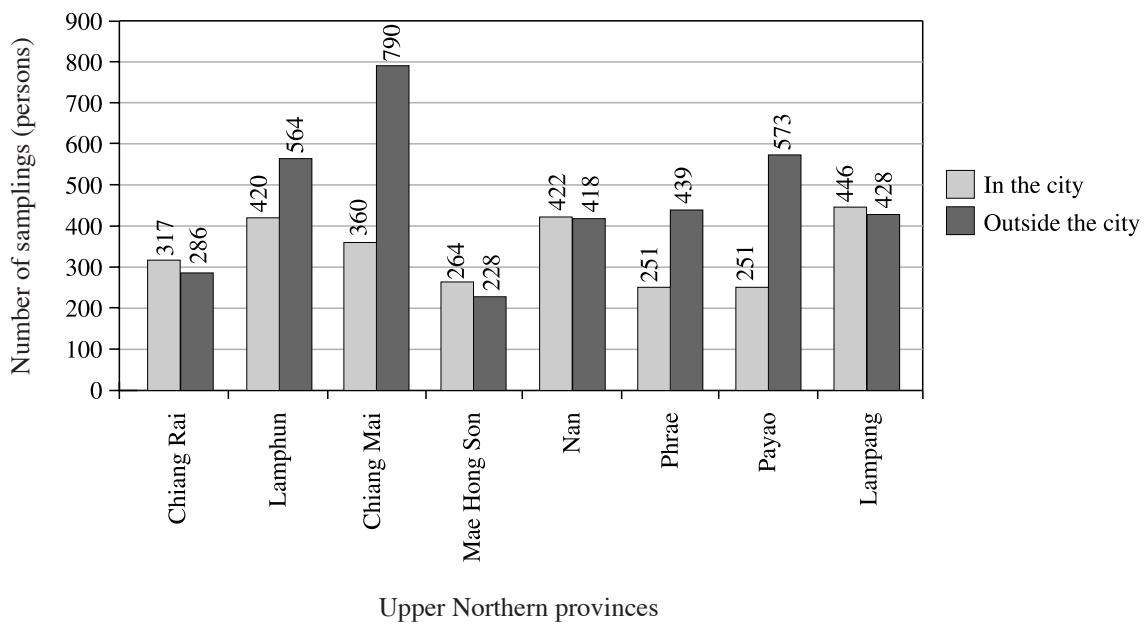
**Bar Chart 1.** Display of number of samplings divided by genders.



**Bar Chart 2.** Display of number of samplings divided by ages.

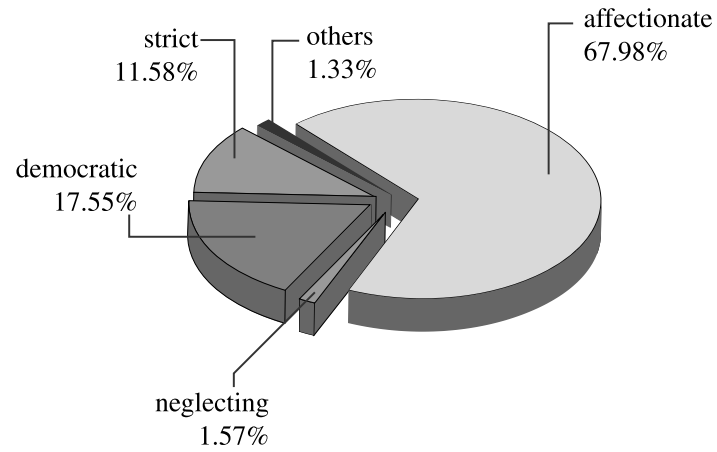


**Bar Chart 3.** Display of school locations classified by provinces.

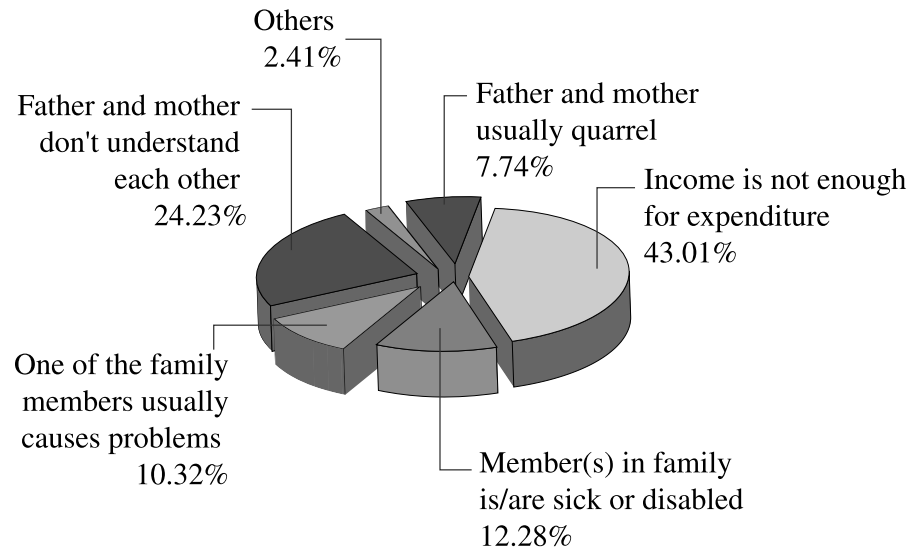


Bar Charts No. 1,2 and 3 display the amount of samplings of the study classified by gender, age and school locations. From this presentation, majority of the samplings in 8 northern provinces were male (54.58%), 14 - years - old (34.44%) and studying outside the city (57.58%).

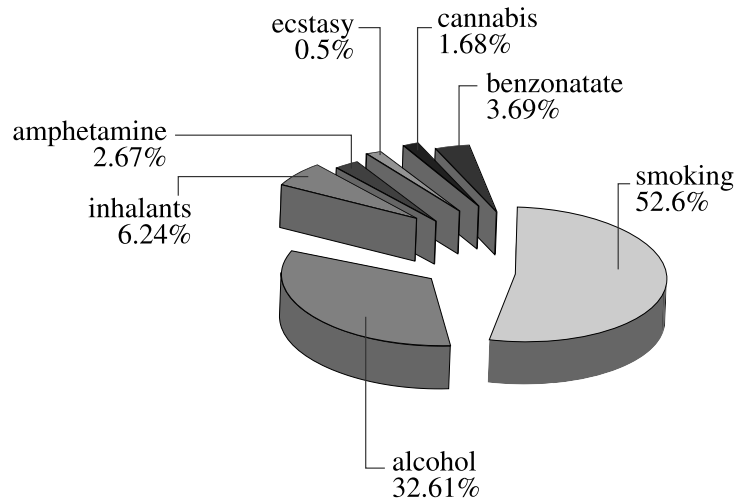
**Pie Chart 1.** Display of the percentage of parenting styles of the samplings' parents.



**Pie Chart 2.** Display of the percentage of family problems found in the samplings.



**Pie Chart 3.** Display of the percentage of addicted substances found in schools.



From Pie Charts No. 1, 2 and 3, majority of the samplings recieved the parenting in affectionate styles (67.98%), had economic problem (43%), addicted substance which had spread most in schools was cigarette (52.6%).

## **Part 2 : Analysis of risk behavior of adolescents in using amphetamine in the Upper Northern region.**

**Table 1.** Shows risk behavior levels of adolescent samplings in 8 Upper Northern provinces, grouped along different variables.

<b>Variables of risk behaviors</b>	<b>(risk level)</b>
1. personality	Low
2. family problem	Low
3. attitude of adolescents towards amphetamine drugs using	Low
4. influence of friends	Low
5. school environments	Low
6. community condition	Low
7. social value	Low
8. perception on information about amphetamine drugs	High

From Table 1, most of the samplings had low risk behavior in using amphetamine according to various variables except for the variable on perception on information about amphetamine drug.

**Part 3 : Analysis on differences of risk behavior of adolescents in using amphetamine in the Upper Northern region.**

**Table 2.** Shows differences of risk behavior categorized by various factors.

Factors		Statistical tests
Gender	Female <sup>1</sup> Male	t = 18.79*
School location	The city <sup>1</sup> Outside the city	t=7.97*
Ages (years)	11–12 <sup>1</sup> 13–14 15 and above	F=60.46*
Level of education (Lower secondary school)	First year <sup>1</sup> Third year Second year	F=4.87*

Note : <sup>1</sup>groups that had the highest mean and arranged from the highest to the lowest.  
\*statistically significant at 0.05

From Table 2, male and female samplings had different risk behavior in using amphetamine, in a statistically significant way. Female adolescents had more risk behavior than male ones. Also statistically significant, samplings studying in the city had more risk behavior than those studying outside the city areas.

Different age groups also display different risk behavior level in a statistically significant way. From the mean comparing, 11–12 years old age group had the most risk behavior, followed by 13–14 years old and 15 years old or older age groups respectively.

Samplings from different educational levels showed different risk behavior differently in a statistically significant way. Samplings studying in Mathayom 1 had the most risk behavior, followed by those studying in Mathayom 3 and 2 respectively.

**Part 4: Analysis of factors relating to risk behavior of adolescents in using amphetamine in the Upper Northern region.**

**Table 3.** Concludes the factors which relate to risk behavior in several aspects.

Factors	Risk behaviors towards amphetamine drug using of adolescents in many parts								
	Marital status of parents	Economic status of family	Education attainment of father	Education attainment of mother	Styles of children raising				
					Affectionate	Neglecting	Democratic	Strict/Autocratic	Other
Personality	1.662	62.630*	72.199*	60.864*	33.368*	12.50*	25.46*	15.606*	6.404
Family problem	76.331*	121.426*	106.632*	75.350*	441.454*	146.09*	24.90*	167.03*	27.032*
Attitudes of adolescents towards amphetamine drugs	1.870	32.797*	64.110*	47.031*	12.090*	27.47*	29.86*	4.375	0.910
Influence of friends	3.843	63.882*	124.428*	79.003*	31.095*	54.12*	30.96*	7.527	3.281
School environment	10.895	57.388*	83.482*	67.924*	27.443*	25.12*	21.28*	18.693*	6.436
Community condition	5.591	35.392*	50.426*	53.167*	54.647*	28.36*	10.08*	51.246*	1.130
Social value	3.494	70.035*	105.491*	71.728*	5.497	24.69*	66.18*	1.967	3.313
Perception on information about amphetamine drugs	4.788	28.690*	72.173*	45.230*	13.962*	21.43*	41.55*	22.234*	2.476

Note : statistics in the table is  $\chi^2$  statistics

\*statistically significant at 0.05

**METHODOLOGY (QUALITATIVE RESEARCH)**

Samplings used in the qualitative research came from purposive sampling method. They were from schools under the supervision of Office of the Basic Education Commission, viz., Chiang Rai, Lamphun, Chiang Mai, Mae Hong Son, Nan, Phrae, Phayao and Lampang. These are 8 provinces forming the Upper Northern region.

**Table 4.** Displays classification of the samplings used in the qualitative research.

Group	Types of sampling group	No.	Method of interview
1	Secondary school students in 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> year	199	Focus group
2	Homeroom teachers / advisors	39	In-depth interview
3	School administrator and relevant staff on the prevention of drug addiction	40	In-depth interview
	Net total	278	



The instrument for the study was the interview forms for students, classroom teachers and school administrators. It was qualitatively checked for its content by 4 experts who helped carry out the project. Analysis of data was done by content analysis method which was divided into 3 following parts:

1. Data arrangement. This was done by filing and bringing relevant data to relevant files.
2. Data reliability. This process consisted of checking qualitative data, making data index and creating conclusion.
3. Right protection of the samplings.

## **RESULTS AND DISCUSSION**

The followings are a summary of the major findings:

### **1. Adolescents' attitudes towards using amphetamine**

This consisted of two kinds of paradigms:

#### ***1.1 Negative attitudes towards amphetamine***

The study revealed that most adolescents had negative attitudes towards using amphetamine, viewing that it caused bad effects to the country, society and people around them. However, their attitudes depended on their conscious perception about amphetamine.

#### ***1.2 Changing popularity in using amphetamine***

Nowadays, popularity among adolescents in using amphetamine has changed due to strict measures implemented by the government. The result was that one tablet of amphetamine cost nearly 500 Baht. Chance for adolescents to buy amphetamine has therefore reduced. Coupled with legal punishment and strict measure adopted in schools, most adolescents dared not involve with amphetamine anymore. They also accepted that it was out-of-date (in using amphetamine) considering modern world trend which focused on natural beauty conservation. Nevertheless, some groups of adolescents turned to basic addicted substances which can be easily bought from local areas. These include tobacco and all kinds of alcoholic drinks. This is because they are more accepted from the society, comparing to amphetamine.

### **2. Process of risk behavior of adolescents in using amphetamine**

From the result of the study, process in the risk behavior consisted of two levels:

#### ***2.1 Initial risk level.*** This usually came up with 3 conditions:

a) Personal condition. This included weak characteristics of adolescents, their hanging out behavior and interest in trying new experiences, finding certain role model and personal stress, their want to release their emotion, their disbelief, their immaturity, personal problems and sexual-related adulterous problem.

b) Family condition. This arose from the following situations: adolescents having family problems, their staying with relatives instead of their own parents, styles of parenting which affected their ability of mental immunity, broken family, records in amphetamine trafficking of members in their family, role model in their family including educational level of their parents.

c) Friend condition. Friends were social environment which was very close to

adolescents. Adolescents' friends came from school, neighbors or from other schools. This became close relationship and their following habits were formed during this time. In order to be accepted from their peer group, their adaptation into the group was important and influenced their thinking, fashion and behavior. Becoming a friend of certain bad group and their persuasion could bring about risk behavior in using amphetamine.

**2.2 Risk level.** This can be subdivided into two stages:

2.2.1 General risk. In this stage, adolescent began to violate school regulation. For example, they came to school late regularly, dressed improperly, took no or less responsibility in their education, had less effort in their study, involved in a fight, changed some of their characteristics, stayed more outside their home, but not yet got involved with basic addicted substances.

2.2.2 Amphetamine risk. In this stage, adolescents would exhibit more risk behavior clearly in many forms. For example, they were absent from the class, mingled with friends, expressed their negative behavior together with their group and began using basic addicted substances, e.g., smoking cigarettes, drinking alcoholic beverage, especially local spirit in traditional festivals of northern Thailand. Also, this could sometimes be found when they played sports.

### **3. Factors causing risk behavior**

These consisted of several factors as follow:

#### **3.1 Geographic factor**

The study showed that different size and location of schools affected student taking care performance differently. Some schools cover an area of over 500 rai, with no fence, surrounded by forest. In some schools, there were few hundred teachers per many thousand students. The location of provinces in northern Thailand has been a route where amphetamine has been trafficked, or a stopover place for drugs manufactured from neighboring countries and brought into the country. The provinces are also located near the 'Golden Triangle', infamous worldwide for drug producing and dealing.

#### **3.2 Northern Thai culture factor**

Amphetamine risk of adolescents could arise from northern Thai culture which allows them to drink spirits in traditional festivals, e.g., Poi Luang, Tan Kuay Salak and other merit-making festivals. This became a norm of society which northern locals accepted and felt it was a normal thing to practise. Adolescents can drink alcoholic beverage without any warning. This has been supported by the upgrade of local production of alcoholic drinks, being developed by government support into a domestic industry or an affordable Tambon product. This trend, notwithstanding school's preaching on good conducts, practically corresponds to northern Thai value. So, this is why northern Thai adolescents know basic addicted substances in their own cultural context which may lead to a more serious addicted substance in further stage.

#### **3.3 Community strength factor**

Amphetamine risk of adolescents did not directly come from schools but from the community into the schools because they are related in many aspects. If certain community is strong because of its commune structure or because the culture that binds community people is strong, amphetamine risk of adolescents usually reduces. On the other hand, if certain community is weak to prevent drugs, risk of adolescents increases.

### ***3.4 Mass media factor***

Broadcasting of information on amphetamine in details continuously by all kinds of media in Thailand has an influence on attitude, behavior pattern and characteristics of adolescents very much. They can learn about amphetamine in many ways, including be stimulated to try or to imitate, even to feel indifferent towards the grave consequence of amphetamine, leading some of them to shut down on receiving related news or information or take less care about amphetamine. In the meantime, some of them may do what is opposite to the widely-distributed information.

### ***3.5 Family factor***

Family is the fundamental and important factor in forming human resources. If certain family has problems, it would affect its members and the developing of human potential. Problems mostly found in Thai families are irresponsibility in parenting, broken family, economic problem, lacking of love and care. These can cause adolescents to seek mental assistance outside home and may lead to the involvement with bad things and can make the adolescents a social problem themselves afterwards.

### ***3.6 Peer group factor***

Adolescent age is the period when human beings have close relationship with their friends. Due to similar age, they tend to understand each other better than other age groups. Coupled with tendency to choose to stay with friends with similar characteristics, both in terms of problems and shared personality, amphetamine risk, therefore, can also come from peer group factor.

### ***3.7 Stress factor***

Stress can be found in all sexes and ages especially in adolescents, an age of storm and stress, which show immature emotion. Stress which is mostly found in adolescents comes from daily life including from their family and studying. They tend to release their stress in a negative way, resulted from emotional immaturity. They express in an inappropriate way, particularly by using basic addicted substances, e.g., tobacco and alcoholic drinks, which can lead them to using other addicted substances.

## **4. The situations on amphetamine spread and school monitoring in the Upper Northern region**

### ***4.1 The situation of amphetamine spread***

The government's urgent policy to overcome the drug problem by using serious measures continuously during past 4–5 years has resulted in the decrease of amphetamine spread in schools and among adolescents in the Upper Northern region in 2004–2005. The rate of its spread reduced to 0–1 %. But there are some adolescents being in legal process. However, in some communities, amphetamine is still present and adolescents can still buy it in certain communities.

The study found that there were some few adolescents who used the addicted substances such as inhalants, cannabis and benzonatate (mixed cough syrup). This was because these substances can be found within their own community, especially cannabis or marijuana which was still clandestinely grown in the Upper Northern region. Although the amphetamine situation among adolescents has reduced, the schools still experience behavior problems of adolescents in 3 types. Firstly, there was the use of basic addicted substances instead of amphetamine. The addicted substances include tobacco and alcoholic drinks,

especially local spirit which was cheap and easy to buy within a community, and was popular among male adolescents. Secondly, there was a sexual problem, a deviation from Thai cultural norm. Lastly, there was violence among adolescents. They tended to fight and expressed their aggressiveness. These can be called risk behavior and related to amphetamine using.

#### **4.2 Amphetamine monitoring**

Approaches used by schools in monitoring drug problems were as follow:

4.2.1 As for monitoring within school compounds, this consisted of the emphasis on organization's leader's roles, student taking-care system as guided by Ministry of Education, structuring of staff and their duty in prevention of drugs, applying psychological knowledge to solve adolescents' problems, teachers' devotion, student's inspector system, and strict punishment measure for those trafficking or using drugs.

4.2.2 As for monitoring outside schools, this consisted of cooperation with community and parents to monitor students' behaviors, and to reduce risk which may occur to teachers on drug prevention duty.

Not only drug problem, schools also monitor sexual problem.

### **CONCLUSION**

Findings from this study, using both quantitative and qualitative methods, revealed the results in different aspects and helped support the information from the findings to be more completed. The findings of two-type study covered the whole process of risk behavior of adolescents in the Upper Northern region in using amphetamine. This is because both methods complemented each other well in this research.

### **ACKNOWLEDGEMENTS**

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### **REFERENCES**

- Amphetamine Drugs War, watch out! Adding Fire in the South. Thai Rat (15 August 2005): 5.
- The Bureau of Narcotics Suppression Board. Display of statistics on drug crime arrests nationwide in weight type classified by types of drug 2001–2005. (Online). Available: <http://www.oncb.go.th> 2003. Retrieved June 7, 2005.