CHAPTER I

INTRODUCTION

1. STATEMENT OF THE PROBLEMS

Alcohol beverages contain ethyl alcohol (ethanol), a drug which depresses or slow down the activity of the body's Central nervous system. Alcohol is classified as a sedativehypnotic similar to barbiturates and minor transquilizers. Alcohol is the most widely used mind altering substances. Alcohol abuse has grown steadily in recent years as populations throughout the world have become more affluent and traditional cultural constraints against its use have dissolved. Alcohol dependence is producing virtual epidemics of accidents, heart diseases, liver disease, strokes, brain damage, pancreatic disease and various types of cancers in every continent. (WHO, 1980) While men have traditionally used alcohol more heavily than women, this is now changing as women status move towards social equality. If there is more alcohol abuse in pregnant women, fetal alcohol syndrome with mental subnormality and perinatal mortality may increase (Claren SK, et al., 1978, Jones KL, et al., 1972). Alcohol abuses usually involve only adult populations is now increasing among youth. In the past alcohol was used in the culture by the more affluent but at present alcohol abuse is spread across the socioeconomic spectrum. Although some religions

such as Hindu, Moslem, Buddhism and certain Christian religions prohibit alcohol consumption among their followers, their influences among the new generations have declined. The problem of drinking affects all social classes. Social drinks are acceptable for upper classes. Those with lower incomes they may use alcohol to suppress personal or family conflicts. They consume cheaper and drink days and nights as Thai says "mao chao mao yen". In general, people feel less under the away of religious constraints. Across South-East Asia including Thailand, illicitly brewed alcohol use has been dramatically increasing and thus the problems further aggravated and intensified. (Arif and Westermeyer, 1988)

In addition to adverse health effects in the individual user, alcohol abuse contributes profound societal problems such as family disruption, spouse and child abuse, compromised economic productivity, crime and violence. (Arif and Westermeyer, 1988)

The alarming data from many countries show that alcohol consumption has steadily increased worldwide. Per capita consumption increased especially in Europe and North America from 50-450% (George Huge Claxton, 1992). The increasing level of alcohol consumption should be considered in light of the relationship between per capita consumption and prevalence of alcohol related problems. Home accidents involving alcohol use commonly involve

women in countries with high rates of alcoholism. Battered wife syndrome also occurs more frequently in those countries. As many as 35-50% of all accidents encountered in emergency rooms are the result of intoxication. About 50% of serious traffic accidents involve with alcohol abuse. More than 90% of all causes of cirrhosis of liver are associated with alcoholism in the countries with prevalent alcoholism. (George Huge Claxton, 1992)

In Thailand, one of the developing country, legal sales of alcohol provide a crude measure of consumption levels. There is industrial manufacture of alcohol and it is also exported and imported. The figures for beer, wine and spirits sales provide a per capita measure of consumption level for the population as a whole. (Talbe 1.1)

Table 1.1 Consumption of Alcoholic Beverages per Capita, Thailand, 1989-1990.

Consumption (lit/capita/year)	1989	1990	rates of increase (%)
spirits (whisky, brandy)	12.5	17.5	40
alcohol (in other beverages)	5.5	7.0	27

Data from the Excise Department, Ministry of Finance

Epidemic situation, number of alcohol abuse, health problems especially accidents associated with alcohol use is rapidly expanding. Thai people who died from traffic accidents had high percentages of alcohol drinking history. (Table 1.2)

Table 1.2   History of Alcohol Drinking Among Thai People who Died from Traffic Accidents Between June-December, 1990.

History of drinking	Number of dead	
	number	percent
History of alcohol use	288	71.1
never used alcohol	112	27.7
not known	5	1.2
Total	405	100.0

Data from the Ministry of Public Health and the Police Department, Ministry of Interior.

Among people who died from motor cycle accidents, we found that the high blood alcohol level, the more percentages of people who died. (Table 1.3)

Table 1.3   Blood of Alcohol Level in People who Died from
Motorcycle Accident, Thailand, 1986-1990.

Blood Alcohol Level (mg %)	1986	1987	1988	1989	1990	Total	%
0	41	39	51	49	94	274	38
<40	8	5	8	9	13	43	6
40-79	8	7	10	12	21	58	8
80-119	13	9	6	13	33	74	10
>120	37	47	39	42	105	270	38

Data from the Ministry of Public Health and the Police
Department, Ministry of Interior.

The Ministry of Public Health by the Department of
Medical Service and Office of the Drug and Substance-use
Control Board have the policy to launch the National
Program for controlling alcohol use disorders. Most of
data available are from other countries. In Thailand the
informations   come   from   special populations.   Alcohol
dependent persons come to the attention from various
places namely:- prisons, courts, general hospitals, mental
health centers and drug treatment facilities because of
their medical conditions such as intoxications, hepatitis,
accidents, cirrhosis and hepatoma.

There are two important reasons in any national epidemiological survey; first, programming for controlling alcohol use disorders whether at the community, regional or national level depends on an estimation of the extent and nature of the problem. Targeting the population groups of high risks, goegraphic placement and even the choice of treatment modality should be determined by epidemiological studies. Second, and the most important, repeated monitoring or epidemiological studies are the key to monitoring changes in drug dependence statistics. This permits modifications in treatment approaches as well as better public educations, law inforcement and similar activities (Huges PH, et al., 1972 and MacKintosh DR, et al., 1979). In order to launch the program, the Ministry of Public Health should have complete and updated data. The national survey is planned in order to establish the levels of alcohol use among the people in the community and also, behavior and pattern of drinking and consequences, factors associated with alcohol abuse and dependence and other related aspects. These informations will be used as baseline data for implementing the appropriate campaign or program for preventive measures, treatment and control.

This survey was conducted in the community of Nakhon Sawan Province, one of the top ten provinces of alcohol consumption per capita of Thailand. (Table 1.4)

Table 1.4   Ranking of Province with High Alcoholic

Beverages Per Capita, Thailand, 1991.

Rank	Province	Consumption (lit/capita/year)
1	Nontaburee	135.64
2	Nakornrachasima	83.31
3	Samudprakarn	82.11
4	Prachinburee	65.76
5	Surin	43.96
6	Nakhon Sawan	43.78
7	Bureeram	39.57
8	Srisaket	36.36
9	Chiengmai	34.98
10	Khongan	32.89

Data from the Excise Department, Ministry of Finance.

This study will be a frame as a pilot study for the national survey.

2. PURPOSES OF THE STUDY
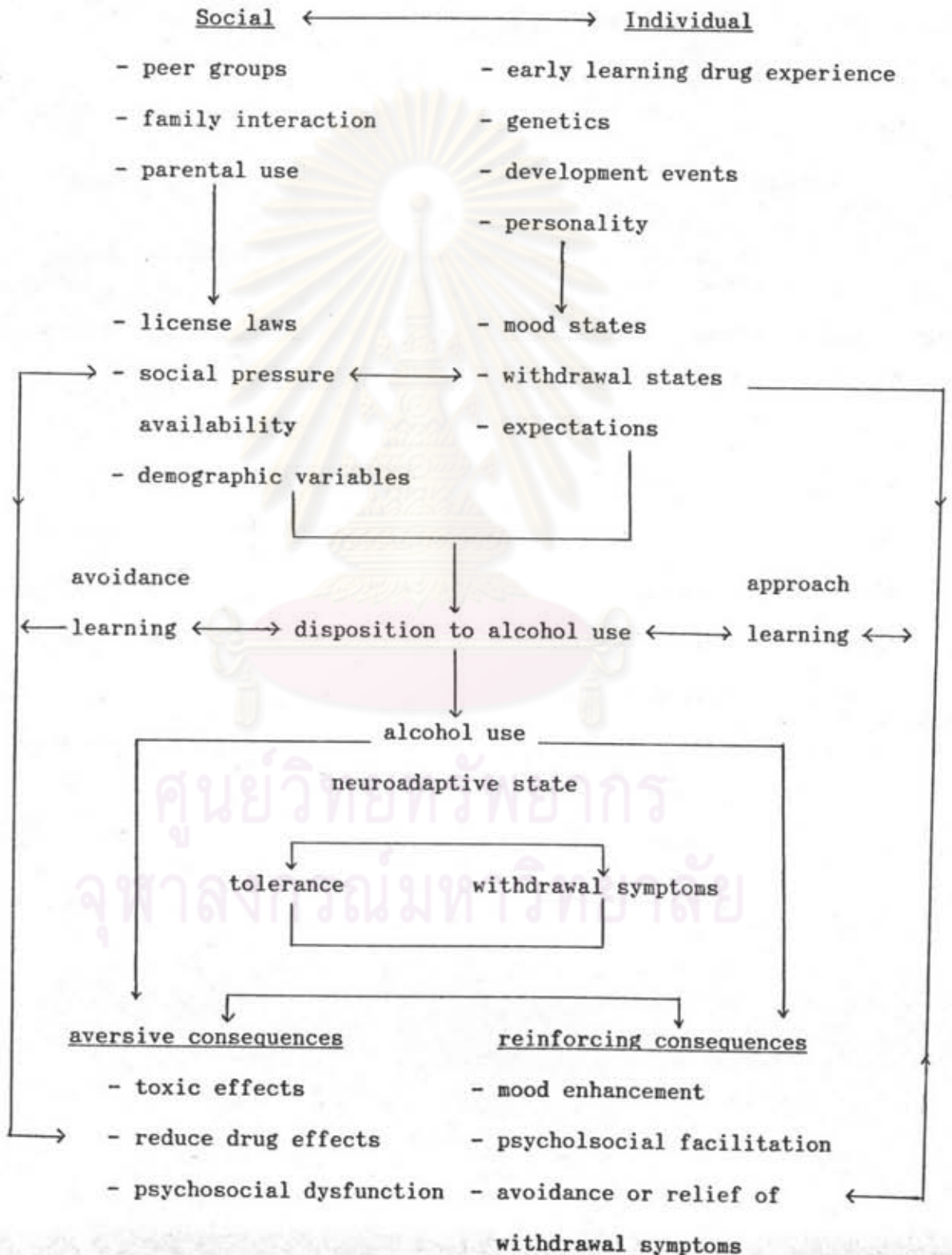
The specific objectives are :

1. To find the prevalence of alcohol use disorders in the community of Nakhon Sawan Province.

2. To study drinking behavior, pattern of drinking, behavioral consequences, co-morbid mental problems and general well-being among alcohol use disorders.

3. To determine factors associated with alcohol use disorders.

3. CONCEPTUAL FRAMEWORK

To study the prevalence of alcohol use disorders, drinking behavior and consequences, co-morbid mental problems, general well-being, associated factors among people in the community of Nakhon Sawan Province by descriptive, cross-sectional survey. (see figure 1.1)

Figure 1.1   Factors Affecting Drug, Alcohol Use and Abuse
(Bull WHO 1981; 59: 225-242).

Social ←————————→ Individual

- peer groups   - early learning drug experience
- family interaction   - genetics
- parental use   - development events
                       - personality

- license laws   - mood states
- social pressure ←——→ - withdrawal states
  availability   - expectations
- demographic variables

avoidance   approach
←— learning ←——→ disposition to alcohol use ←——→ learning ←——→

alcohol use

neuroadaptive state

tolerance   withdrawal symptoms

aversive consequences   reinforcing consequences

- toxic effects   - mood enhancement
- reduce drug effects   - psycholsocial facilitation
- psychosocial dysfunction   - avoidance or relief of
                                 withdrawal symptoms

4. RESEARCH QUESTIONS

Primary search question :

1. What are the extent of alcohol use disorders among people in the community of Nakhon Sawan Province ?

Secondary research question :

2. What are drinking behavior, pattern of drinking, associated factors, behavioral consequences and general well-being among alcohol use disorders ?

3. What are associated factors and problems among persons with alcohol use disorders and persons who do not use alcohol ?

5. HYPOTHESIS

There are characters of drinking behavior, pattern of drinking, behavioral consequences, co-morbid mental problems and general well-being among alcohol use disorders in Nakhon Sawan Province and there are differences in associated factors and problems among persons with alcohol use disorders and persons who do not use alcohol.

6. EXPECTED BENEFIT AND APPLICATIONS

1. We will have the baseline epidemiological data about alcohol use in Nakhon Sawan Province for planning the program in controlling alcohol use disorders. This frame

can be used as a pilot study for conducting a national survey.

    2. For further research about preventive strategies, treatment modalities and interventions that emphasize on "treatment matching" that come from the data of alcohol use disorders of this study.

7. KEY WORDS

Alcohol use disorders are classified in DSM-3-R into

    1. Alcohol abuse means the pathological use of alcohol with impair social function associated with alcohol use.

    2. Alcohol dependence means there is physiologic tolerance or withdrawal symptoms from alcohol and pathological use or impair social function associated with alcohol use.

Community means people living in Nakhon Sawan Province. The population covered in the survey is the civilian non-institutional population which consist of all persons who reside in private households excluding special households, institutions and households of foreign diplomatic personels.

Prevalence means the number of episodes of individuals in experiencing alcohol use disorders existing in the point of time that the survey has been conducted.