

ALCOHOL CONSUMPTION AND HEALTH CONSEQUENCES
AMONG VILLAGERS IN THUM TONG SUB-DISTRICT,
MUEANG NAN DISTRICT, NAN PROVINCE, THAILAND.

Mr.Thanawat Rattanawitton

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Public Health Program in Public Health
College of Public Health Sciences
Chulalongkorn University
Academic Year 2010
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5 3 7 9 1 0 3 8 5 3

การดื่มเครื่องดื่มแอลกอฮอล์และผลกระทบต่อด้านสุขภาพของชาวบ้านตำบลถ้ำลอด
อำเภอเมืองน่าน จังหวัดน่าน ประเทศไทย



นายธนะวรรณ รัตนวิฑูรย์

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต
สาขาวิชาสาธารณสุขศาสตร์
วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย
ปีการศึกษา 2553
ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

Thesis Title ALCOHOL CONSUMPTION AND HEALTH
CONSEQUENCES AMONG VILLAGERS IN THUM
TONG SUB-DISTRICT, MUANG NAN DISTRICT, NAN
PROVINCE, THAILAND

By Mr.Thanawat Rattanawitoon

Field of Study Public Health

Thesis Advisor Usaneyya Perngparn, Ph.D.

Accepted by the College of Public Health Sciences, Chulalongkorn University
in Partial Fulfillment of the Requirements for the Master's Degree



.....Dean of the College of Public Health Sciences

(Professor Surasak Taneepanichskul, M.D.)

THESIS COMMITTEE



..... Chairman

(Associate Professor Sathirakorn Pongpanich, Ph.D)



..... Thesis Advisor

(Usaneyya Perngparn, Ph.D)



..... External Examiner

(Nanta Auamkul, M.D, M.P.H.)

ธนะวรรณ รัตนวิฑูรย์ : การดื่มเครื่องดื่มแอลกอฮอล์และผลกระทบต่อด้านสุขภาพของชาวบ้าน ตำบลถืมตอง อำเภอเมืองน่าน จังหวัดน่าน ประเทศไทย (ALCOHOL CONSUMPTION AND HEALTH CONSEQUENCES AMONG VILLAGERS IN THUM TONG SUB-DISTRICT, MUANG NAN DISTRICT, NAN PROVINCE, THAILAND) อ.ที่ปรึกษา วิทยานิพนธ์หลัก: อ.ดร.อุษณีย์ พึ่งปาน , 103 หน้า.

การศึกษาวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาสถานการณ์ดื่มเครื่องดื่มแอลกอฮอล์และผลกระทบต่อด้านสุขภาพของชาวบ้านตำบลถืมตอง อำเภอเมืองน่าน จังหวัดน่าน และหาความสัมพันธ์ระหว่างข้อมูลปัจจัยด้านประชากรและสังคมและลักษณะการดื่มเครื่องดื่มแอลกอฮอล์ ต่อผลกระทบต่อด้านสุขภาพจากประชากรตัวอย่างจำนวน 334 คน เป็นการศึกษาแบบภาคตัดขวาง จากประชากรที่อายุระหว่าง 18 ถึง 64 ปี โดยวิธีการสุ่มตัวอย่างแบบมีระบบและเก็บข้อมูลด้วยการสัมภาษณ์แบบตัวต่อตัวตามแบบสัมภาษณ์ที่สร้างขึ้น วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนา การทดสอบค่าไคว์-สแควร์ (Chi-square test) และ ค่าสหสัมพันธ์ (Correlation) เพื่อหาความสัมพันธ์ระหว่างข้อมูล ผลการศึกษาพบว่า มีผู้ดื่มเครื่องดื่มแอลกอฮอล์ทั้งหมด 230 คน คิดเป็นร้อยละ 68.9 ผู้ชายดื่มเครื่องดื่มแอลกอฮอล์ (ร้อยละ 74.6) มากกว่าผู้หญิง (ร้อยละ 58.7) โดยกลุ่มอายุช่วงวัยทำงานดื่มมากที่สุด ร้อยละ 49.1 ของกลุ่มผู้ดื่มทั้งหมดดื่มเหล้าขาวมากที่สุด รองลงมาคือ เบียร์ (ร้อยละ 40) โดยผู้ชายนิยมดื่มเหล้าขาวมากที่สุด ในขณะที่ผู้หญิงดื่มเบียร์มากที่สุด ผู้ชายร้อยละ 76.7 และผู้หญิงร้อยละ 71.8 จัดอยู่ในประเภทการดื่มหนักหรือดื่มเกินมาตรฐานที่กำหนดไว้ กลุ่มผู้ดื่มส่วนใหญ่ดื่มกับเพื่อนมากที่สุดและดื่มมากในช่วงเทศกาลต่าง ๆ ร้อยละ 63 ของผู้ดื่มอยู่ในระดับกลุ่มผู้ดื่มแบบเสี่ยงอันตราย ครึ่งหนึ่งของกลุ่มประชากรตัวอย่างมีทัศนคติด้านลบกับการดื่มเครื่องดื่มแอลกอฮอล์ ผลการวิเคราะห์ความสัมพันธ์ระหว่างปัจจัยต่าง ๆ กับผลกระทบต่อด้านสุขภาพโดยใช้สถิติ ไคว์ - สแควร์ พบว่า เพศ ระดับการศึกษา อาชีพ รายได้ ชนิดของเครื่องดื่ม และความถี่ของการดื่มเครื่องดื่มแอลกอฮอล์มีความสัมพันธ์กับผลกระทบต่อด้านสุขภาพ และการหาค่าสหสัมพันธ์ระหว่างค่าคะแนนประเมินภาวะเสี่ยงการดื่มสุรา (AUDIT) กับผลกระทบต่อด้านสุขภาพ พบว่า มีความสัมพันธ์กัน ($p < 0.001$) การศึกษาในครั้งนี้สรุปได้ว่า ประชาชนตำบลถืมตองยังคงมีการดื่มเครื่องดื่มแอลกอฮอล์และส่วนมากดื่มในระดับเสี่ยงสูง ซึ่งทำให้มีผลกระทบต่อทางด้านสุขภาพอย่างมีนัยสำคัญทางสถิติ

สาขาวิชา สาธารณสุขศาสตร์

ปีการศึกษา 2553

ลายมือชื่อนิสิต

ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก

5379103853: MAJOR PUBLIC HEALTH

KEYWORDS : ALCOHOL CONSUMPTION/ HEALTH CONSEQUENCES /
VILLAGERS

THANAWAT RATTANAWITON : ALCOHOL CONSUMPTION AND
HEALTH CONSEQUENCES AMONG VILLAGERS IN THUM TONG
SUB-DISTRICT, MUANG NAN DISTRICT, NAN PROVINCE,
THAILAND. ADVISOR: USANEYA PERNGPARN, Ph.D., 103 pp.

This study was aimed to identify and characterize the alcohol consumption situation among villagers and its health consequences. It sought to determine association between socio-demographic factors and alcohol drinking pattern with health consequences among 334 respondents in Thum Tong sub-district, Muang Nan district, Nan province, Thailand. Using cross-sectional study, villagers aged 18 – 64 years old were included in this study. Respondents were selected using systematic random sampling. Data collection was done by face to face interview questionnaires. Descriptive statistic, Chi-square and correlation were used to determine association between socio-demographic factors and alcohol drinking patterns with health consequences. The study revealed that about 69% (230) of respondents were drinkers. Male drank alcoholic beverages more than female (74.6% and 58.7% respectively) did. The majority of drinkers were in working aged. The majority of drinkers 49.1% drank white spirit followed by beer (40.0%). Most males drank white spirit while females drank beer. Male and female drank more than standard drinks per occasion (76.7% and 71.8% respectively). Most of them drank with friends during the festivals. Respondents were predominant hazardous drinkers (63.0%). Half of respondents had negative attitudes towards alcohol drinking. Sex, educational attainment, occupation, income, the types and frequency of drinking were found to be significantly associated with the intensity of health consequences. Moreover, levels of consumption was found to be positively correlated with health consequences scores ($p < 0.001$). In conclusion, drinking alcoholic beverages is still found high prevalence among Thum Tong villagers. With a significant proportion drinking at risky levels, significant health consequences are reported.

Field of Study : Public Health.....

Academic Year : 2010.....

Student's Signature Thanawat Rattanawitorn

Advisor's Signature Usaneya Perngparn

ACKNOWLEDGEMENTS

I would like to express my overwhelm gratitude and deep appreciation to my thesis advisor, Dr.Usaneyya Perngparn, for her advice, encouragement and guidance throughout the whole process of this study and courses of MPH as well.

I greatly express my thanks to Assoc. Prof. Sathirakorn Pongpanich, Ph.D as my thesis chairman and Nanta Auamkul, M.D. the thesis examiner for their valuable advice to accomplish my study.

I also would like to thank all my teachers at the College of Public Health Sciences, Chulalongkorn University who have given support and guidance throughout my study.

My thanks are extended to my friends, MPH program, in College of Public Health Sciences for their kindness, sincerity, love and great friendship. And I am especially thankful to my wonderful Ph.D. friends, Myra, Donna and Som, who gave me suggestions and encouragement.

And finally, I would like to give deepest thanks to my family for their encouragement, their support and their love.

ศูนย์วิทยทรัพยากร
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LIST OF ABBREVIATIONS

CAS	Center of Alcohol Studies
CDC	Center of Diseases Control and Prevention
NCD	Non Communicable Disease
AUDIT	Alcohol Use Disorders Identification Test
BAC	Blood Alcohol Content
IFG	Impaired Fasting Glycerin
HCC	Hepatocellular Carcinoma
BMI	Body Mass Index
CAP	Community Acquired Pneumonia
ESCC	Esophageal Squamous Cell Carcinoma
HIV	Human Immunodeficiency Virus



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CHAPTER I

INTRODUCTION

1.1 Background & Rationale

Alcohol consumption is a major cause of health problems not only in Thailand but around the world. Alcoholic beverages have been available since ancient times. Moreover, people have consumed and served alcohol beverages at special ceremonies, welcoming guests, New Year parties, Christmas parties and various occasions for generations. Alcohol consumption is a common social behavior. The attitudes, beliefs and traditions of alcoholic beverage consumption have become an important behavior of everyday life in Thai society.

On the other hand, alcohol consumption can cause physical, mental and social problems. Alcohol consumption is one important factor increasing cancer such as liver cancer. Alcohol consumption during pregnancy causes spontaneous abortion, slower fetal growth in the womb, premature birth and low birth weight. Alcohol consumption may increase the risk of developing diseases such as diabetes, hypertension and stroke. Alcohol consumption may cause problems with the digestive system. Alcohol consumption may increase the risk factors of injury such as road accidents, falls, fire and violence. In addition, alcohol consumption may cause mental health problems, as well.

The World Health Organization (WHO, 2002) estimated that about 2 billion people around the world consumed alcoholic beverages and about 76.3 million people were diagnosed with alcohol disorders. The effects of alcohol consumption, both in terms of morbidity and mortality, was directly related to the global burden and was considerable in most parts of the world. Alcohol consumption caused 3.2% of deaths (1.8 million) and 4.0% of the Disability-Adjusted Life Years lost (58.3 million) worldwide. Overall, there were associations between alcohol consumption and more than 60 different types of disease and injury. (1) At the present time, alcohol consumption leads the risk factor for disease burden in developing countries. Additionally, in developed countries, it is the third largest factor.

In Thailand, the statistics of alcohol consumption, per capita consumption, among adult aged 15 years and above reported by WHO in 2001 and 2003 were 8.5 and 5.6. (2) The result of a survey carried out by the National Statistical Office showed that there were 14.9 million alcohol drinkers in 2007 or 29.3% of the population 15 years and above. Even though the number had decreased from 16.2 million people or 32.7 % in 2007, the percentage of male drinkers was much higher at 51% than female drinkers at 8.8%. Among all people who consumed alcohol, 3.8% drank alcohol every day. The rate of regular drinkers had increased from 17.8 % during 2004 to 20.3 % during 2007. At the present time, alcohol consumption is very popular among teenagers, especially students from secondary school. (3)

When it came to per capita consumption, Thailand has been rated as one of the highest in the world for the past decade. From 1989 to 2003, the annual per capita was pegged at 20.2 liters in 1989 and rose to 58 liters in 2003. Within this period, Thailand ranked fifth in consumption of spirits, eighty-fifth in consumption of beer and one hundred twenty-fourth in consumption of wine in 2001. Even though alcohol consumption is particularly common among males, the alcohol consumption among females ages 15-19 years old rose six fold from 1986 to 2003. (4)

In 2004, Nan province was ranked first for prevalence of alcohol consumption in Thailand. 52.67% of the population aged 15 years and above consumed alcohol. (5) The government has tried to solve that problem by supporting the funding to reduce alcohol consumption. Thum Tong sub-district was the only sub-district in Nan which received funding from the Ministry of Social Development and Human Security of Thailand, the Thai Health Promotion Foundation and the National Health Foundation for a project to reduce alcohol consumption. The project was called “song serm srang sakaya-pab krob-krua plod abai-yamok” (Family Potential Enhancement Safe Evil Path). The working groups were village leaders, health volunteers, health workers and representatives from the villages, schools and temples such as a monk, a youth, a local district officer, a teacher, a housewife and an elderly person.

The objectives of this project were to survey the number of gambling addicts, together with alcohol consumption and their related problems and to announce a

public policy promoting alcohol and gambling-free funerals in Thum Tong sub-district.

The activities from this project were to educate people in the villages about tobacco, alcohol and gambling through village meetings, and to survey the amount of gambling and alcohol consumption. Questions included how much people spend for gambling every month, and how much they spend for alcohol for one week. Additionally, feedback was provided to the people in all 8 villages and a public policy was established and announced in village meetings to promote alcohol and gambling free funerals in all 8 villages. This was the first public policy to reduce alcohol consumption in Thum Tong sub-district. The policy began in 2005. The objective of this policy is to not allow any alcoholic beverage to be served to anyone during a funeral. The fine is 2,000 baht for someone who consumes alcohol or for the house owner who serves alcoholic beverages at a funeral. This policy continues to be evaluated by surveys and interviews with the people who participate in the funerals.

In 2006, the percentage of Thai people abstaining from alcohol during Buddhist Lent (a three-month period beginning in July or August every year) had increased from 40% in 1996 to 63%. (6) Therefore the government has tried to encourage people in Thailand with the campaign for No Drinking during Buddhist Lent. At the same time, Thum Tong sub-district health care center received funding from Thum Tong sub-district Administrative Organization to do a project for No Drinking during Buddhist Lent. The activities were to recruit participants in all eight villages to give up drinking and to hold a group meeting at the temple to gain their support in this project. This project was evaluated by survey, interviews with the participants' families or their neighbors. The result of this project indicated that there were 150 participants who could stop drinking during the Buddhist Lent. Moreover this project continues to the present day.

In 2007, people in Thum Tong villages and the village leaders realized that the public policy of promoting alcohol and gambling free funerals and the project of No Drinking during Buddhist Lent were successful and helpful for people in all 8 villages. People did not drink in funerals and during the Buddhist Lent, and some

people stopped drinking completely during that period. Therefore, the village leaders agreed that in Thum Tong sub-district should have further strategies to reduce alcohol consumption.

There were some problems during the sports day in all 8 villages including fighting between drunken people and accidents involving drunken people. Therefore Thum Tong village leaders announced the new policy promoting an alcohol free sports day to reduce alcohol consumption and prevent any problems from drinking such as fighting and accidents. Moreover the sports day should be a healthy day to encourage people in all 8 villages to do exercise. Any alcohol drinking is prohibited during the sports day and people will be fined 2,000 baht if they drink. This project continues to the present day.

The Thai government announced a national alcohol consumption policy on 13 February 2008. The summary of this declaration is to not allow to the sale of alcoholic beverages at temples, public health offices, government offices, dormitories, schools, gas stations and parks, and to prohibit the sale of alcoholic beverages to people who are younger than 20 years old and to people who are under the influence of alcohol. The Policy aims to reduce alcohol consumption among youth, to reduce alcohol consumption for people in Thailand and to reduce the impact of alcohol consumption for people in Thailand. This policy continues to the present day.

In addition, the percentage of Thai people abstaining from alcohol drinking in Buddhist Lent has increased to 65%. Therefore Thai government has declared the first day of Buddhist Lent as a National holiday and as a No Alcoholic Drinks Day to reduce alcohol consumption. (6)

Since 2005, Thum Tong sub-district continues the strategies to reduce alcohol consumption such as promoting alcohol and gambling free funerals, alcohol free sports day and no alcohol during Buddhist Lent. Moreover in 2008, Thai government has declared the national policy of controlling alcohol consumption.

On the other hand, Thum Tong sub-district health care center reported that cancer was ranked second, hypertension was ranked third and accidents involving consumption of alcohol ranked fourth in terms of death ratios in 2009. In addition, in the ratio of illnesses in 2009, cardiovascular disease was ranked first and digestive system and disease was ranked fifth. (7) According to the reports, those diseases may develop from alcohol consumption and alcohol consumption may cause of health problems. Moreover, until now, there has been no study of alcohol consumption and health consequences in Thum Tong sub-district. Therefore it is important to study alcohol consumption and the related health consequences in Thum Tong sub-district, Nan, Thailand.

1.2 Expected Benefits & Application

1. The findings will be useful for knowing the consumption and health and behavioral consequences related to alcoholic beverages in Thum Tong sub-district, Nan, Thailand.

2. People in Thum Tong sub-district will realize about alcohol consumption problems therefore people in Thum Tong sub-district may drink less.

3. This study can be used and applied in other villages in Nan province to reduce alcohol consumption.

1.3 Research question

Is there an association between socio-demographic variables distribution and alcohol consumption pattern with alcohol consequences among villagers in Thum Tong sub-district?

1.4 Research objectives

1. To identify the situation of alcohol consumption among villagers in Thum Tong sub-district, Muang Nan district, Nan province, Thailand.
2. To identify the characterized health consequences attributable to alcohol drinking.

1.5 Conceptual Framework

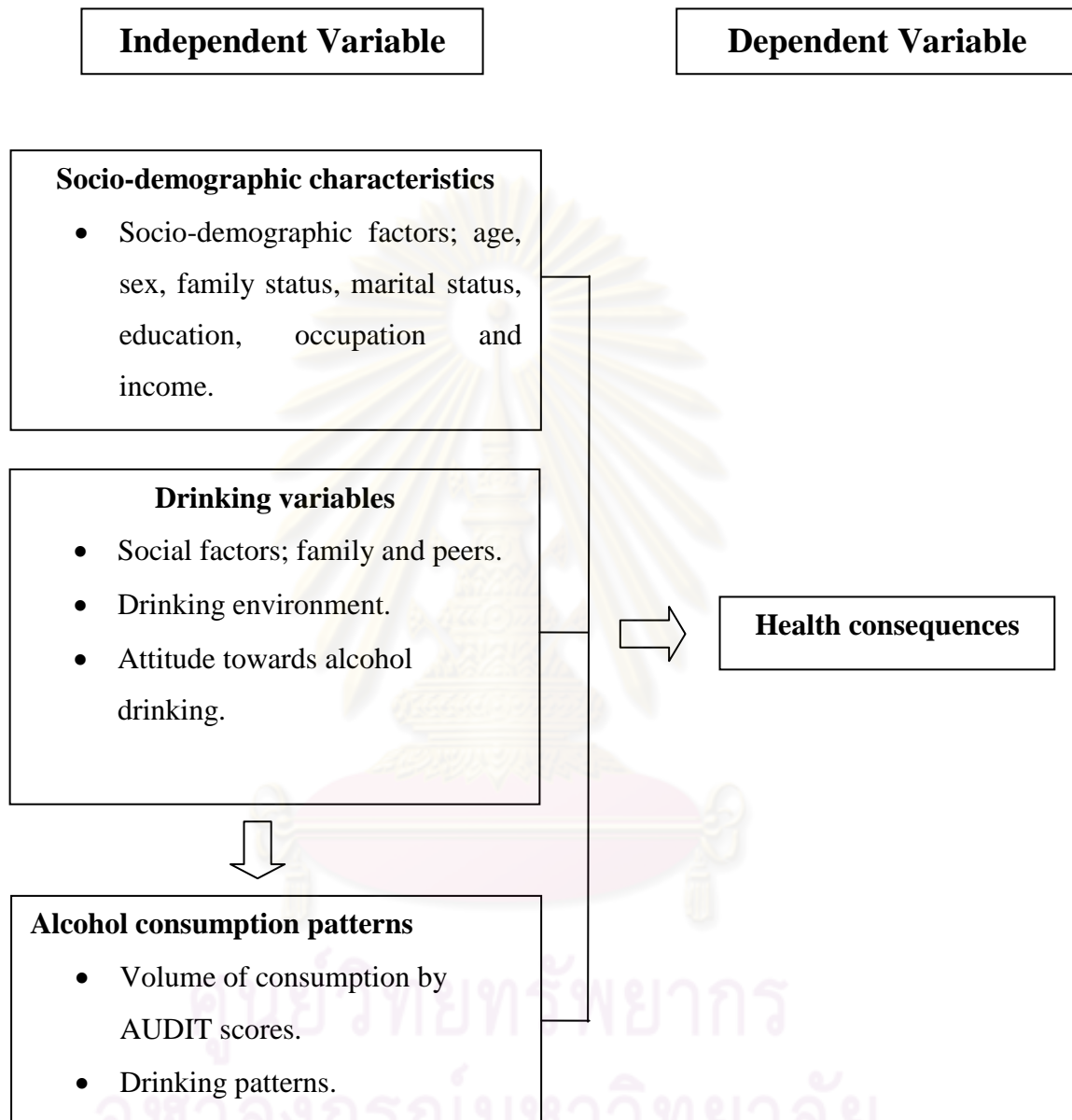


Figure 1 Conceptual Framework

1.5.1 Independent Variables

The independent variables of this study are risk factors of alcohol consumption including:

- Socio-demographic characteristics including; age, sex, family status, marital status, education, occupation and income.

- Social factors including family and peers.
- Drinking environment.
- Attitude towards alcohol drinking.
- Alcohol consumption by AUDIT scores.
- Drinking pattern such as types of drinking, quantity of drinking and frequency.

1.5.2 Dependent Variable

The dependent variable of this study is health consequences of villagers in Thum Tong sub-district. Health consequences are any health problems caused by alcohol consumption. In this study, there are 6 effects such as accidents, violence physical, mental, social and legal effects. The subjects were villagers aged 18 years to 64 years who resident in Thum Tong sub-district.

1.6 Operation Definitions

For the purpose of this study, the following terms are operationally defined:

- **Health consequences** refer to physical effects, mental effects, social effects, legal effects, accidents and violence.
- **Social factors** refer to the factors that are influenced by alcohol consumption. In this study, the social factors are family and peers.
- **Drinking environment** refers to any places that drinkers go for drinking such as their own home, neighbor's homes, restaurant, office, or pub.
- **Attitude towards alcohol drinking** refers to the attitude of people in Thum Tong sub-district towards alcohol consumption, alcohol situation and health consequences.
- **Volume of alcohol consumption** refers to the quantities of alcoholic beverages that people have consumed. In this study, volume of alcohol consumption is classified by Alcohol Use Drugs Identification Test (AUDIT) as low risk, hazardous drinking, harmful drinking and alcohol dependence.
- **Standard drinks** refer to amount of drinking at least one time per occasion in past 12 months by CDC, male = 5 drinks and female = 4 drinks.

- **Alcohol consumption pattern** refers to volume of alcohol consumption by AUDIT scores and drinking pattern. There are 4 categorized for AUDIT.
 - **Low risk** refers to the risk of people who have consumed alcoholic beverages, in men not more than 2 standard drinks and in women not more than 1 standard drink.
 - **Hazardous drinking** refers to a pattern of alcohol consumption that increases the risk of harmful consequences for the user or others. Alcohol drinking in men is 4 – 6 standard drinks and 2 – 4 standard drinks in women.
 - **Harmful drinking** refers to alcohol consumption those results in consequences to physical and mental health. Alcohol drinking in men is more than 6 standard drinks and more than 4 standard drinks in women.
 - **Alcohol dependence** refers to a cluster of behavioral, cognitive, and physiological phenomena that may develop after repeated alcohol use. People may have some symptoms such as tolerance, withdrawal symptoms, impaired control, and preoccupation with acquisition and/or use.
- **Drinking pattern** refers to types of drinking, quantity of drinking and frequency of drinking.
- **Drinking > standard drink** refers to female who drinks equal or more than 4 standard drinks at least one occasion in the past 12 months and male who drinks equal or more than 5 standard drinks at least one occasion in the past 12 months.

CHAPTER II

REVIEW OF LITERATURE

The aims of this study are to identify the situation of alcohol consumption and villager health's problems related to alcohol drinking among villagers in Thum Tong sub-district, Nan province, Thailand. This chapter present a review of the concepts related to these topics such as definition of alcoholic beverage, health consequence, alcohol situation of the world, Thailand, Nan province and Thum Tong sub-district and related research.

2.1 The definition of alcoholic beverages

The World Health Organization (WHO) provides the 2 major classifications of alcohol and alcohol beverages (8). There are two classifications of alcohol. The firstly is methyl alcohol or rubbing alcohol that is used in the chemistry laboratories and industries. Methyl alcohol has been used in the industries. Methyl alcohol is a poisonous that is caused of the health consequence. The secondly is ethyl alcohol or ethanol. Ethyl alcohol has been consumed because it is intoxicating and mind-altering effects. It is usually consumed in diluted concentrations of absolute (i.e. 100 per cent) ethyl alcohol. Some industries use ethyl alcohol as a reagent.

The different degree of alcohol in each type depends on the preparation process and there are many kinds of alcoholic beverage and such as

1. **Wine** is made from fruits, such as grapes, pineapples, peaches, plums or apricots. The most common wines are made from grapes.
2. **Beer** is produced by the process of fermentation. Yeast and malted cereal are used for the fermentation. Alcohol and carbon dioxide is produced by fermentation.
3. **Whisky** is made by distilling the fermented juice of cereal grains such as corn, rye or barley.

4. **Rum** is made by distilled the fermented molasses or sugarcane juice. It has processed for at least three years.
5. **Brandy** is made by distilled from fermented fruit juices. Brandy is usually aged in oak casks.
6. **Gin** is a distilled beverage. It is a combination of alcohol, water and various flavors.
7. **Liqueurs** are made by adding sugar and flavoring such as fruits, herbs or flowers to brandy or to a combination of alcohol and water.

Table 2.1 Types of alcohol and degree of alcohol

Types of Alcohol	Degree of Alcohol (% Vol.)
Wine	10 – 22
Beer	4 – 8
Whisky	40 – 55
Rum	40 – 55
Brandy	40 – 50
Liquors	20 – 65

Moreover Center of Diseases Control and Prevention (CDC) defined a standard drink as any drinks that contain (13.7 grams or 1.2 tablespoons) of pure alcohol such as 12-ounces of regular beer or wine cooler, 8-ounces of malt liquor, 5-ounces of wine and 1.5-ounces of 80-proof distilled spirits or liquors (e.g., gin, rum, vodka, whiskey). (9)

Department of Mental Health Thailand defined alcoholic beverage as any addictive substance that are fermented by fruits or cereal. (10) There are 3 types of alcoholic beverages such as

1. Beer
2. Wine
3. Spirits

The degree of alcohol beverage depends on what kind of alcohol such as wine contains 12 percent of alcohol and beer contains 5 percent of alcohol. The definition of alcoholic beverage of Department of Mental Health Thailand will be used for this study.

2.2 Health Consequence

World Health Organization (WHO) defined Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. (11)

Health effects and global burden of disease; alcohol use is related to wide range of physical, mental and social harms. Alcohol affects practically every organ in the human body. Alcohol consumption was linked to more than 60 diseases. The link of alcohol consumption and health consequence depends on two main dimensions of alcohol consumption such as

- Average of alcohol consumption and pattern of alcohol drinking.
- Mediating mechanisms: biochemical effects, intoxication, and dependence.

Over alcohol consumption is the leading preventable causes of death in the world. The effects of alcohol consumption are long term effect and short term effect. One or two drinks of alcohol can result in changes in behavior or decrease in ability to think clearly. Because alcohol comes directly into mouth, throat, esophagus, stomach and intestines. Therefore health problem can start from headache, feeling nausea and sore throat. However alcohol and health problem can develop more illness and diseases if alcohol abuse continues. (12) Usually effects of alcohol are happened within ten minutes of having a drink and blood alcohol content (BAC) will be at a maximum usually forty to sixty minutes later. The BAC will remain steady until the liver is able to metabolize the alcohol which will be at the rate of about one drink per hour. Short term effects of alcohol intoxication are the direct result of increases in the BAC levels. There are short terms effects of alcohol consumption such as

1. **Lowered Inhibitions;** BAC reaches 0.05, the behavior begins to change.

2. **Poor Coordination;** BAC levels reach 0.10, the effects of alcohol is slurred speech, inability of thinking and lack of coordination. The consequence can cause falls and accidents.
3. **Blackouts and Loss of Memory;** alcohol consumption affects brain function. It is absorbed the bloodstream and carried to brain therefore drinker will not know and recognize what they have done.
4. **Nausea Sickness;** body may attempt to get rid of alcohol when drinking too much. Drinker can feel nauseous because alcohol has interfered with the body's sense of balance.
5. **Hangovers and Headaches;** it is happened in the next day. Hangover can be felt only a few hours after consuming. Headache is a consequence of binge alcohol.
6. **Stupor;** BAC reaches 0.40, drinker are likely to be extremely disoriented, confused and uncoordinated. Their brain and muscular functions will be seriously impaired.
7. **Coma;** BAC reaches 0.50; this is extremely dangerous as many coma patients do not recover. There is a high risk of respiratory failure and death. (13)

Moreover the long term effects of alcohol on human body are

1. **Nervous system;** long term effects can lead to brain shrinkage, dementia, physical dependence and increasing in neuropsychiatric and cognitive disorders. Heavy alcohol consumption interferes with developing of new cells in the brain. In fact, brain and nervous system are sensitive of the toxic effects of chronic alcohol consumption. Chronic alcohol consumption can lead to insomnia, depressive disorder and also Wernicke-Korsakoff syndrome.
2. **Cardiovascular System;** alcohol consumption is associated with increasing risk of suffering from stroke. Binge alcohol can lead to alcoholic cardiomyopathy. Alcohol consumption can lead to anemia, thrombocytopenia and hypersplenism. The effect of alcohol consumption is to cause a slight increasing in blood pressure.

3. **Digestive System;** alcohol consumption can lead to chronic gastritis in a person. Long term effects of alcohol can develop liver cirrhosis, hepatitis and pancreatitis. Liver cirrhosis is the major health problem around the world. Effects of alcohol on the liver include developing of fatty liver and alcoholic hepatitis. Acute and chronic pancreatitis and malabsorption may be seen as the long term effects of alcohol consumption. The International Agency for Research on Cancer (Centre International de Recherche sur le Cancer) of the World Health Organization has classified alcohol as a carcinogen (cancer causing agent) and reported that 3.6% of all cancer cases worldwide are related to excessive alcohol drinking.
4. **Other Systems;** even though alcohol consumption has a greater effect with nervous system and cardiovascular system. Alcohol tends to affect the entire of body. Alcohol consumption can cause the chronic lung disease. Long term abuse of alcohol also tends to lead to impotence in men and loss of sexual desire. Binge alcohol can lead to hyperestrogenization, developing of gouty arthritis and osteoporosis. Alcohol consumption can lead to breast cancer in women. There are many skin disorders that may occur of alcohol consumption such as urticaria, porphyria, flushing, psoriasis and pruritis.(14)

A study on risk factors of hypertension, diabetes and obesity in Italian psoriasis patients that collected information on alcohol consumption by Altobelli, et.al in 2009 found that hypertension, obesity and type 2 diabetes were associated with psoriasis. The risk of hypertension, type 2 diabetes and obesity in psoriasis patients were related with smoking habits and alcohol consumption. Psoriasis patients who smoke more than 15 cigarettes per day and regularly drink more than 2 glasses of wine per day were at greater risk of hypertension. The OR for hypertension was higher for both smokers (> 15 cigarettes per day, OR= 1.37) and drinkers (> 2 glasses/day of wine, OR= 2.11). The OR for either diabetes or obesity was higher for drinkers: 1 drink/day (OR = 1.93) and > 1 drink/day of spirits (OR = 2.90) respectively. (15)

A study by Lui, et.al on associations of alcohol consumption with diabetes mellitus and impaired fasting glycemia among middle-aged and elderly Chinese in 2010 found that in men, low and high alcohol consumption were associated with increased risk of having combined diabetes (OR= 1.36 ,95%CI:1.02-1.82) and impaired fasting glycerin. (IFG) (OR = 1.50, 95%CI: 1.04- 2.15) Liquor drinker in men had increased risk of having combined diabetes and impaired fasting glycerin. (OR: 1.47, 95%CI: 1.09-1.98) (16)

A study in 2010 on alcohol and HCV chronic infection are risk cofactors of type 2 diabetes mellitus for hepatocellular carcinoma in Italy by Balbi, et.al found that alcohol consumption and DM 2 type were risk factor of HCC. Type 2 diabetes mellitus (DM2) was associated with hepatocellular carcinoma (HCC) development. In HCC patients, the OR for HCC was significantly higher when DM2 was associated with alcohol abuse (49.0) than with chronic HCV infection (36.9). Moreover, the study was shown that alcohol consumption in an independent risk factor for HCC more relevant than HCV infection. (17)

A study on effect of body mass index and alcohol consumption on liver disease by Hart C, et.al found that BMI and alcohol consumption were associated with liver cancer mortality ($p=0.001$, $p<0.0001$ respectively). Obese drinking, drink more than 15 units per week, was higher risk of liver cancer than underweight and normal non-drinker group. The RR of drinker 15 units or more per week for each group were 3.16 for underweight/normal weight in men, 7.01 for overweight and 18.9 for obese men. The RR of obese men who consumed less than 15 units per week was 5.3. (18)

A study by Samokhvalov, et.al on alcohol consumption as a risk factor for pneumonia in 2010 found that the RR of CAP (Community Acquired Pneumonia) had increased with increasing alcohol consumption. Individuals consuming for daily intake of 24, 60, and 120 g per pure alcohol, RRs for incident CAP were 1.12 (95% CI 1.02–1.23), 1.33 (95% CI 1.06–1.67) and 1.76 (95% CI 1.13–2.77) relative to non-drinkers. Alcohol-use disorders were associated with an eightfold increased risk of

CAP (RR 8.22, 95% CI 4.85–13.95). Alcohol consumption was found to be a risk factor and association for pneumonia. (19)

A study by Nakashita, et.al on relationships of cigarette smoking and alcohol consumption to metabolic syndrome in Japanese men in 2010 found that cigarette smoking and alcohol consumption were significantly associated with the prevalence of Metabolic syndrome in Japanese men ($P < 0.0001$, $P = 0.030$ for trend). People who smoked more than 30 cigarettes/day, the odds ratio for prevalence of metabolic syndrome was 1.89 (95% confidence interval: 1.34–2.65) compared with non smoker, OR of drinker who consumed more than 69 grams/day was 1.54 (95% confidence interval: 1.06–2.23) compared with non drinker. The OR of interaction of smoker and drinker was 2.03 (1.02–4.01, $P = 0.043$). Therefore Japanese men who drank and smoked heavily were risk for metabolic syndrome. (20)

A study by Tai, et.al on cigarette smoking and alcohol drinking and esophageal cancer risk in Taiwanese women in 2010 found that frequencies of smokers and drinkers among esophageal squamous cell carcinoma (ESCC) patients were 19.6% and 21.6%, respectively, which were significantly higher than smokers (4.4%) and drinkers (4.4%) among controls (OR = 4.07, 95% CI: 1.36-12.16, $P = 0.01$; OR = 3.55, 95% CI: 1.03-12.27, $P = 0.04$). Women who drank an amount of alcohol more than 158 g per week had a 20.58-fold greater risk (95% CI: 1.72-245.62, $P = 0.02$) of ESCC than those who never drank alcohol. (21)

A study on alcohol consumption and digestive cancer mortality in Koreans by Yi, et.al in 2010 found that in men, the risk of mortality from esophageal cancer and colon cancer were higher among heavy drinking. The RR of esophageal cancer was 5.62 and 95% confidence interval [CI] was 1.45–21.77. Moreover RR of colon cancer was 4.59 and 95% CI was 1.10–19.2. The risk of colon cancer and esophageal cancer rose with increasing alcohol consumption. (22)

A study by Lew, et.al in 2009 on alcohol and risk of breast cancer by histologic type and Hormone receptor status in postmenopausal women found that alcohol consumption was significant positively associated with breast cancer.

Moderate alcohol consumption also increased breast cancer risk. Moderate consumption of alcohol was associated with breast cancer, specifically hormone receptor-positive tumors. (23)

A study by Theresa, et.al on maternal alcohol use during pregnancy causes systemic oxidation of the glutathione redox system in 2010 found that alcohol use during pregnancy caused significant oxidation of the systemic GSH (Glutathione) system in the post partum women. Any alcohol use during pregnancy significantly decreased plasma GSH ($p < .05$). Moreover alcohol more than 3 drinks/occasion or more than 5 drinks/occasion significantly decreased plasma GSH concentration ($p < 0.05$). (24)

A study by Zaidze, et.al on alcohol and cause-specific mortality in Russia in 2009 found that in men, three causes of alcohol associated-death were accident and violence. The RR was 5.94 and 95% CI was 5.35–6.59. Alcohol consumption was strongly associated with mortality from accident, violence and some diseases. More than half of death in young men aged 15-25 in this study caused by alcohol consumption. (25)

A study by Hahn and Samet on alcohol and HIV disease progression in 2010 found that heavy alcohol consumption results in behavioral and biological processes was likely increased HIV disease progression, and experimental evidence of the biological effect of heavy alcohol on simian immunodeficiency virus in macaques was quite suggestive. (26)

According to the studies, alcohol consumption is associated with some diseases and some diseases may cause by alcohol consumption such as hypertension, diabetes mellitus, liver disease, pneumonia, digestive cancer, breast cancer, pregnancy, accident and violence. People now have consumed alcohol drinking as a social behavior. People serve alcohol drinking with good food in various occasions such as house warming party, New Year party, Songkran party, funerals, farewell party and so on. Therefore numbers of drinkers have increased and they may have some health problems by alcohol consumption.

2.3 World Alcohol Situation

Alcohol consumption has occurred since thousand years. Alcohol consumption has increased in recent decades in globally. This increase is occurring in the countries and especially developing countries. World Health Organization (WHO) estimated that there were about 2 billion people worldwide consuming alcoholic beverages and 76.3 million were diagnosed with alcohol use disorders. (1) In 2001 and 2003, World Health Organization (WHO) reported the statistics of alcohol consumption per capita among adult aged 15 and above by region.

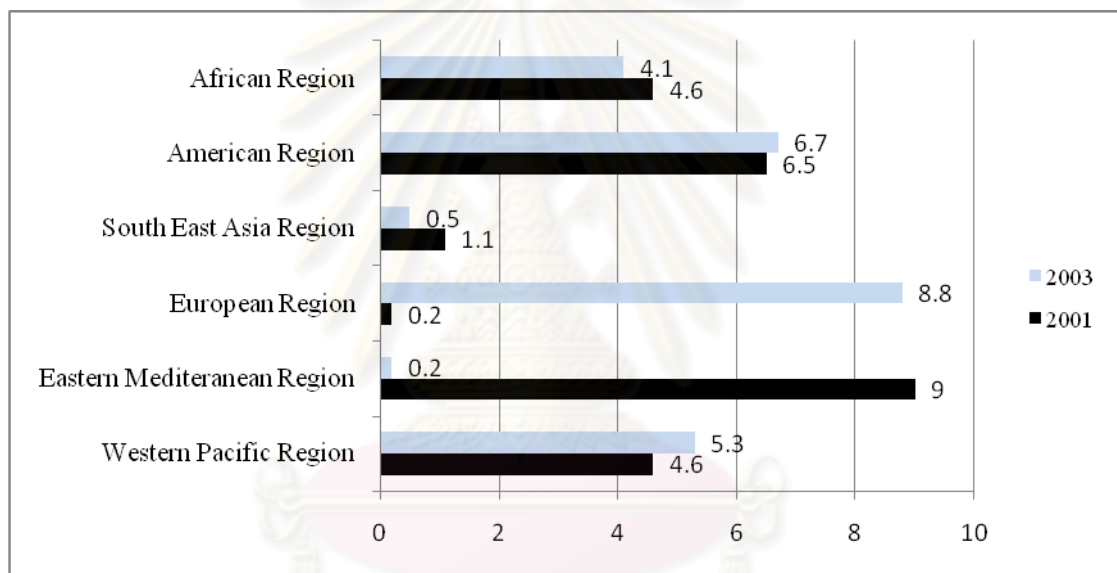


Figure 2.1 Alcohol consumption per capita (liters of pure alcohol) among adult aged 15 years and above by region

Source: World Health Statistics, Risk factors, 2005, 2008

From the figure 2.1, alcohol consumption per capita had sharply decreased in Eastern Mediterranean region and slightly decreased in South East Asia region and Africa region. On the other hand, European region had sharply increased and slightly increased in Western Pacific region and American region.

World Health Organization (WHO) reported top ten leading causes of death by broad income 2004; in low-income countries, coronary heart disease was ranked second, stroke and cerebrovascular diseases was ranked fifth. Middle-income

countries, stroke and cerebrovascular diseases was ranked first, coronary heart disease was ranked second, road traffic accident was ranked sixth, hypertensive heart disease was ranked seventh, stomach cancer was ranked eighth and diabetes mellitus was ranked tenth. High-income countries, stroke and cerebrovascular diseases was ranked second, diabetes was ranked eighth, breast cancer was ranked ninth and stomach cancer was ranked tenth.(27) According to causes of death, these diseases may cause by alcohol consumption.

2.4 Thailand Alcohol Situation

Thailand, alcohol consumption is the major risk factor for health problems. As alcohol consumption is a social behavior. Therefore people are always welcome and serve guests with good food and alcohol. Center of Alcohol Studies (CAS), Thailand reported that among adult aged 15 and above, the ranks of any kinds of alcoholic beverage were increased in 1999 – 2001. Moreover alcohol consumption per capita of any kinds of alcoholic beverage had increased in 1999 – 2001.

Table 2.1 World rankings of alcohol consumption in Thailand from 1998 to 2001.

Year	World Rank			
	Total	Beer	Wine	Spirits
1998	50	102	146	9
1999	44	102	138	6
2000	43	92	132	6
2001	40	85	124	5

Source: Center of Alcohol Studies (CAS). Alcohol Consumption (28)

From Table 2.1, the Center of Alcohol Studies reported that the total of alcohol consumption had increased from ranked fiftieth to ranked fortieth and consumption of beer, wine and spirits also had increased. Moreover, WHO reported that the rank of alcohol consumption in Thailand was ranked fortieth, ranked fifth for spirits, ranked eighty-fifth for beer, and one hundred twenty-fourth for wine in 2005.

Table 2.2 Alcohol consumption (per capita) in Thailand from 1998 to 2001.

Year	World Rank			
	Total	Beer	Wine	Spirits
1998	7.71	1.09	0.01	6.61
1999	8.31	1.13	0.03	7.16
2000	8.40	1.25	0.03	7.12
2001	8.47	1.31	0.04	7.13

Source: Center of Alcohol Studies. Alcohol Consumption (28)

Table 2.2 shows the per capita intake in liters as reported by the Center for Alcohol Studies from 1998 to 2001, across the three-year period, per capita intake has been increasing across the three alcohol classifications. This shows that, globally, individual drinkers have been steadily increasing their alcohol consumption. People are drinking more alcohol.

Ministry of Public Health by Health Information Unit reported the leading causes of death in 2009 (per 100,000 populations), accident and poisonings was ranked second (55.63 per 100,000 populations), heart disease was ranked third (28.96 per 100,000 populations), hypertension and cerebrovascular disease were ranked fourth (24.66 per 100,000 populations) and disease of liver and pancreas was ranked seventh (13.49 per 100,000 populations). (29) According to causes of death, these diseases may be caused by alcohol consumption.

2.5 Nan Alcohol Consumption

In 2004, Nan province was ranked first for prevalence of alcohol consumption in Thailand. There was 52.6 % among population aged 15 years and above of alcohol consumption. (5) Even though in 2009, the National Statistical Office reported that Nan province was ranked fourth for prevalence of alcohol consumption, prevalence of weekly and monthly alcohol consumption was ranked first in Thailand. There was 22.3 % among population who consumed alcohol weekly and monthly. (30)

Nan Public Health Provincial reported the top ten leading causes of death in 2009 that Ischemic heart was ranked fifth, strokes was ranked sixth, accident by transportation was ranked eighth and liver cirrhosis was ranked ninth. (31) Moreover top ten leading causes of illness in 2009, blood circulation was ranked second and digestive system was ranked third. (32) According to the top ten leading causes of death and illness, these diseases may cause by alcohol consumption

2.6 Thum Tong Sub-District Alcohol Consumption

The major health problem in Nan province is related with non communicable disease (NCD). This has led to the creation of the No Sweet, No Oily, No Fat, No Salty, No Smoking and No Drinking policy under the auspices of the Nan Public Health Provincial Office. According to this policy, Nan Public Health Provincial has provided the computer program named NCD Program (Non Communicable Disease Program) for all hospitals and sub-district health care centers in Nan province since 2008. To record the health data collected during health screening among Nan residents aged 15 years and older. The data from health screening are collected by village health volunteers and personnel health worker through the survey questionnaires once a year. The questionnaire include questions on socio-demographic, health status, risk factor, practices when it comes to smoking, drinking, exercise, safe sex, road safety, food and breast self examination for 6 months prior to the administration of the survey. Thum Tong health care center has used this program. Therefore there is a report for alcohol consumption that shows in the figure below.

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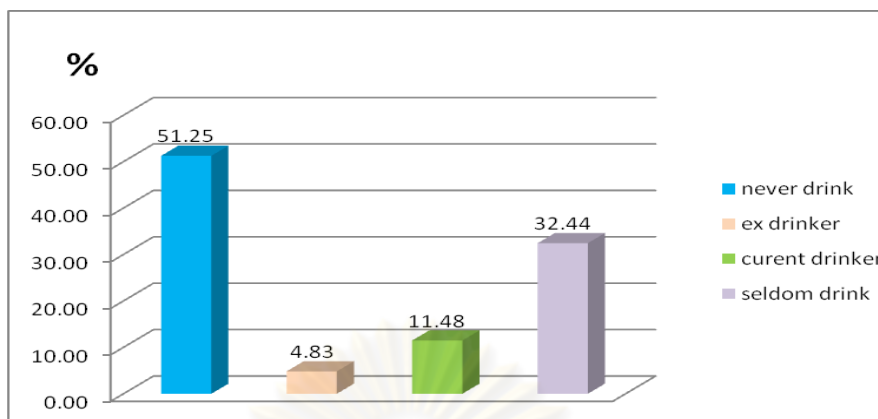


Figure 2.2 Levels of alcohol consumption at Thum Tong sub-district in 2009

Source: Thum Tong health care center, NCD program (2010 December 4)

Figure 2.2 shows the alcohol consumption of the residents from Thum Tong health care center in 2009. Half of the respondents indicated that they have never drunk alcohol. Among those who have a history of drinking, 32.44% have indicated that they drink at least once a month while 11.48% drank at once a week. Even though most of those who drink don't drink that often, they are at risk of increasing the frequency and volume of alcohol consumption as time progresses.

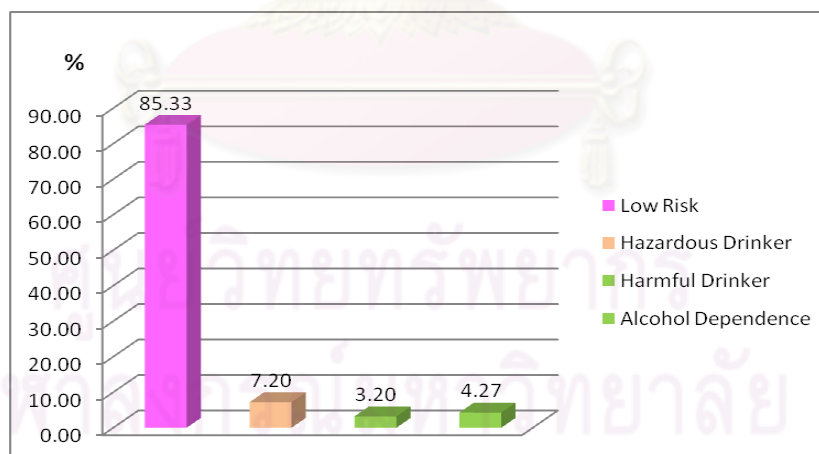


Figure 2.3 Percentage of AUDIT at Thum Tong sub-district in 2009

Source: AUDIT reported in 2009, Thum Tong health care center.

Figure 2.3 shows that even though the percentage of hazardous, harmful and alcohol dependence is not too high (14.67%) compared to low risk (85.33%), low risk can develop to be any kinds of drinker too if people do not realize for alcohol consumption. Moreover this AUDIT report just interviewed 375 patients who came to Thum Tong health care center.

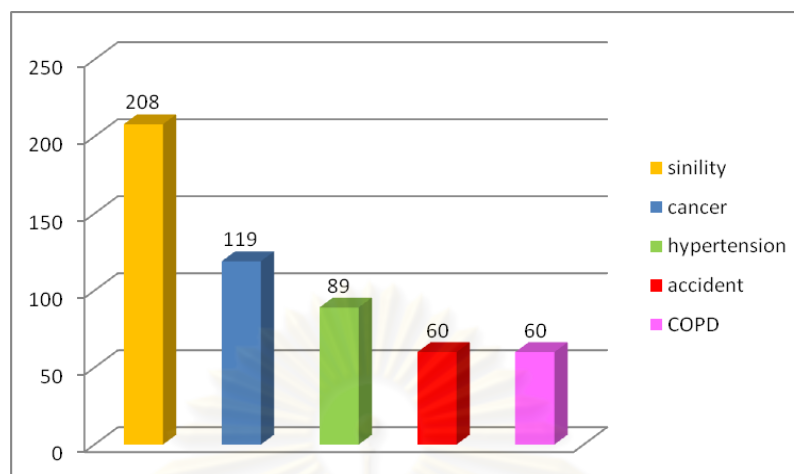


Figure 2.4 Top five leading causes of death (per 100,000 populations) of Thum Tong sub-district 2009
Source: Database of health status by Thum Tong sub-district health care center 2009

From figure 2.4 cancer was ranked second, hypertension was ranked third and accident was ranked fourth of mortality rate. These diseases may cause by alcohol consumption.

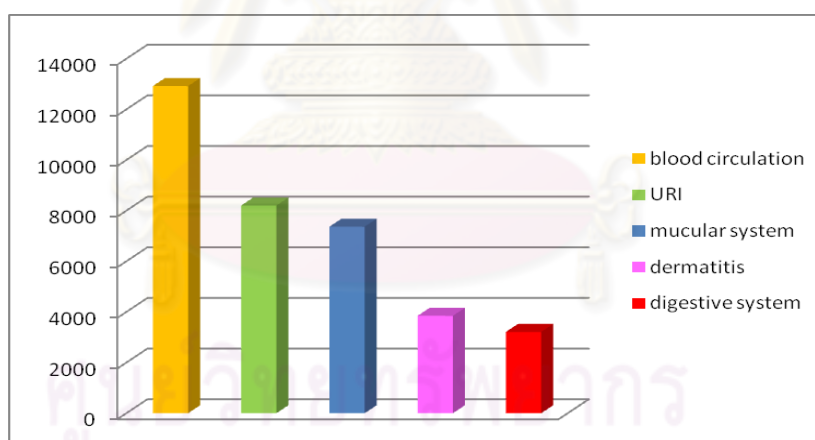


Figure 2.5 Top five leading causes of illness (per 100,000 populations) of Thum Tong sub-district 2009
Source: Database of health status by Thum Tong sub-district health care center in 2009

From figure 2.5 shows that blood circulation was ranked first and digestive system was ranked fifth of morbidity rate. Due to the causes of illness, these diseases may cause by alcohol consumption.

According to top five leading causes of illness and death of Thum Tong sub-district, all diseases may cause by alcohol consumption. Some studies show that alcohol consumption is related to the health consequences.

2.7 Related Research

Related research on alcohol consumption and health consequence are both international and domestic as the follow:

A study by Hutaphet, et.al on an analysis of alcohol use factor related workplace violence in 2009 found that alcohol consumption was associated with workplace violence. Alcohol drinking stimulated a worker to commit violence. The acts of workplace violence were sexual harassment acts with violence levels ranging from low to high. Moreover suggested guidelines for providing helps and solving problems were the provision of advices and counseling, medical treatment and restoration, and legal advices and lawsuit. (33)

In 2009, Onin studied on alcohol consumption and impact of consequence and family among youth found that there were three main factors in youth drinking such as lack of confidence to refuse an offer drinking, access to buy alcohol drinking and the motivations of peers. The effects of alcohol drinking in youth were mainly accident and violence. Moreover the effects from mental health, parents were worried when youth go for drink and also suffered from supporting money. (34)

A study by Ruangkanchanaset on Youth risk behavior survey in 2005 found that alcohol consumption was the major risk factors. The prevalence of major risk factors in adolescents in Bangkok was significantly high such as the risk factor leading road accident, drivers who consumed alcohol were risk to have an accident 12.1 % and if riding with drunken drivers were risk 18.8%. (35)

Vira studied on the role of alcohol in Thailand, motorcycle crashes in 2005 reported that alcohol accidents were more frequent on weekend or night time such as when riders were on their home. Drinking riders were likely to lose control of motorcycle. Males were far likely to drink and ride than females. Drinking riders were more likely to be hospitalized and far more likely to be killed. (36)

A study by Chaveepojnkamjorn on factors associated with alcohol consumption among secondary school students in 2010 found that the percent of

hazardous drinking by AUDIT was 12.59. Both male and female, there were factors that associated with alcohol consumption such as peer usual alcohol intake and peer occasion alcohol intake. Peer groups and close friends should be considered carefully when attempting to reduce the risk of alcohol consumption. (37)

A study on alcohol misuse and depression symptoms among males and Females by Shahrzad (2010) found that Alcohol misuse, stress, and education level all correlated with greater depression in men whereas age was most significant for women. Men who misused alcohol were 2.5 times more likely to report greater depression (OR=2.47, 95%CI=1.37 – 4.45, $P_{0.05}$). In women, a 10-year increase in age was associated with a 36% increase in the odds of depression (OR=1.55, 95%CI=1.12 – 2.13, $P_{0.05}$). (38)

In 2010, Pama studied on alcohol consumption in Estonia and Finland found that the proportion of abstainers was 1.5 times higher among women than men in both countries. Frequency of alcohol consumption was lower among less educated than higher educated respondents in Finland, but not in Estonia. The amount of consumed alcohol per week was higher among less educated men in Estonia, but lower among women with basic education in Finland. (39)

A study by Ramsey, et.al on brief alcohol intervention among at-risk drinkers with diabetes in 2010 found that brief alcohol interventions are efficacious in reducing alcohol use among at-risk drinkers with diabetes and that reductions in alcohol use may result in some improvements in adherence to diabetes self-care behavior. (40)

A study by Liangpunsakul in 2010 on relationship between alcohol intake and dietary pattern found that Alcohol intake was associated with body mass index and body weight in women. Of all macronutrients, carbohydrate intake was the first to decrease with increasing alcohol consumption. In the multivariate analyses, the level of alcohol consumption was found to be an independent predictor associated with lower intake of other macronutrients. (41)

According to the studies, alcohol consumption is associated with some diseases and also the risk factors of accident and violence. Drinkers have a higher risk factor with some diseases than non drinker such as workplace violence, motorcycle crash, depression and obesity. Therefore people should be realized and aware for alcohol consumption that may be affected with their health in the future.



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

The study employed a cross-sectional design. It determined the socio-demographic variables distribution and alcohol consumption pattern with alcohol consequences of villagers. The objective of this study was to identify and characterize the situation of alcohol consumption among villagers and its health consequences. The research employed quantitative by questionnaires for the data collection. The descriptive statistics were used to describe the profile of alcohol consumption among villagers. Qualitative study was applied to describe the health consequence.

3.2 Study Area

The study was conducted in Thum Tong sub-district, Nan Province, Thailand. Thum Tong sub-district is comprised of 8 villages such as Ban Thum Tong moo 1, Ban Kheun Keaw moo 2, Ban Wang Khong moo 3, Ban Na Thor Dein moo 4, Ban Kew Pa Ha moo 5, Ban Don Thum Tong moo 6, Ban Mai Suk San moo 7 and Ban Fai Kae moo 8.

3.3 Study Population

The study population was both male and female residents in Thum Tong sub-district, Nan Province, Thailand. Ages of the study population were 18 year to 64 years old. There were 1,069 males and 1,137 females. Therefore the total of study population was 2,206 persons. (42)

3.4 Sample and Sample Size

This study used systematic randomly sampling and “subjects” refers to Thum Tong villagers. The calculated sample size needed for this study was 334. This was computed by using Cochran (1977). The formula that was used to calculate the sample size and the assumptions is given below:

$$n = \frac{Z^2(p * q)}{E^2}$$

Z = confidence interval CI = 95%

p = proportion of population

q = 1-p

E = standard error

$$n = \frac{1.96^2(0.32 * 0.68)}{0.05^2}$$

$$n = 334$$

The population size is 2,206. There are 8 villages in Thum Tong sub-district health care center. The sample size was 334. Therefore the sample size for each village was the proportion of population in each village multiplied by the total sample size and divided by total study population of Thum Tong sub-district. The calculation of the sample size is shown in the figure below.



Figure 3 Sampling size and sampling technique.

The researcher determined inclusion criteria as people who were aged 18 years to 64 years and resident in Thum Tong sub-district. This is because people who are younger than 18 years may not give the real answers from the interview and they may have some trouble if their parents know that they have consumed alcohol beverages. People who were aged 65 years and above may have chronic diseases already, moreover it may be difficult to determine if those diseases are related to alcohol consumption.

An exclusion criterion was pregnant women because pregnant women do not drink alcohol. Even though they drink, it is not easy to determine if their diseases are from alcohol consumption. People who have mental health problems and cannot communicate with the researcher and research assistants were also excluded.

3.5 Measurement Tools

There were 4 parts to the questionnaire. It comprised of:

- Part 1; Socio-demographics.

There were 8 questions in this part. They included general information such as sex, age, family status, marital status, education, occupation, income and perceptions toward drinking alcohol.

- Part 2; Attitude towards drinking alcohol.

There were 15 questions in this part. They asked for the attitude towards drinking alcohol such as drinking for health, drinking in society and public policies towards alcohol in Thum Tong sub-district. The answers were coded as 0 = agree, 1 = disagree and 2 = not sure. The answers to these questions revealed a person's positive or negative attitude towards drinking alcohol. If more people agree with a positive question than disagree, it would be classified as positive attitude. On the other hand, if more people agree with a negative question than disagree, it would be classified as negative attitude.

- Part 3; Drinking history and AUDIT.

There were 13 questions for drinking history. The questions asked about patterns of drinking such as frequency of drinking, quantify and types of alcohol consumed, where people drink, and who they drink with. There were additional questions that focused on drinking during festivals and special occasions. This part comprised of both quantitative and qualitative study. The qualitative study was analyzed for the health consequences.

AUDIT (Alcohol Use Disorders Identification Test) provided 10 questions asking about alcohol consumption. The ranking score for any item is 1 – 4. There are 4 levels to classify alcohol consumption: 1 is a person who is at low risk or who abstains from drinking alcohol, 2 is a hazardous drinker, 3 is a harmful drinker, and 4 is alcohol dependent.

- Part 4; Health consequences.

There were 15 questions in this part. Health consequences consist of accidents, violence, physical, mental, social and legal effects,. The answers were codes as 0 = no, 1 = yes, and 2 = n/a.

The questionnaire was approved by three professors for validity. Pre-tests were organized one month before the data collection. The questionnaire was pre-tested by the researcher and research assistants in Sanain sub-district, Muan Nan district, Nan, Thailand for reliability. The pre-test questionnaire aimed to determine the strength and weakness of questions, wording and word order and the understandability of the questions.

3.6 Data Collection

In each village, a spot map was developed. The researcher collected the geographical location of all housing units in the village. For each household, the following information was collected: the house number, number of people living in the house, and the number of people aged 18 to 64 years old in the household. The household data collected at this stage was input in Form 1. This was the sampling frame for the research. Respondents to the survey were selected systematically.

Figure 3 shows the needed sample size from each village. Systematic sampling was used to select the sample size. The researcher computed the skipping pattern by dividing the total number of households by the sample size for each village. Random starts were used to choose the first household by random number in the Microsoft Excel program. Then the first household was counted as “1”. Moving to the right of the map and following the pre-drawn line, households numbered “1” were subsequently selected. On the spot map, these were marked red. Form 2 was filled out with information on the selected households.

Research assistants were trained on how to use the questionnaire by the researcher. The respondents were interviewed by research assistants. If the subjects were in more than one in the household, research assistants chose the sampling randomly. Picking up the name was used to select the respondent. In cases where there was no respondent at home, the research assistants made an appointment and came back again. To report this data, the research collected the questionnaires and returned them to the researcher. The researcher checked them and completed them by hand first before entering the raw data into the computer program.

3.7 Data Analysis

Data collected from this study was analyzed for quantitative, qualitative and descriptive statistics using SPSS software for Windows. Descriptive statistics of frequency, percentage, mean and standard deviation were calculated to analyze data regarding socio-demographics and pattern of alcohol drinking. Chi-square analysis was used to examine the association between alcohol socio-demographics and alcohol consumption pattern with health consequences. There were 15 health consequences in this study. The mean scores of health consequences were 3.635. Therefore health consequences were categorized in 2 groups by using mean scores to be the cut point. Scores between 0 and 4 were categorized as low health consequences while scores greater than 4 were categorized as high consequences. Correlation analysis was used to examine the association with AUDIT scores and health consequence scores. Content analysis was used to analyze in the interview results on health consequences that were related to alcohol consumption.

3.8 Ethical Consideration

This study was reviewed and approved by The Ethics Review Committee for Research Involving Human Research Subjects, Health Science Group, Chulalongkorn University. Signed informed consent forms were collected from all respondents prior to their participation in the study. All data collected from each individual respondent was kept private and confidential. All data was coded using a unique alpha-numeric code assigned to each respondent.

3.9 Limitations

The results of the study were limited for generalization to the whole country because Thum Tong sub-district is only a small section of the district and is not representative of the trends in the whole country. The results of the questionnaires relied on self-reported data, specifically the respondent's answer. This presents significant limitations on the type of data that was collected from the respondent since no biological or scientific validation was conducted to confirm his/her response. Because the questionnaires consisted of quantitative and qualitative study and as they were long and contained many questions, respondents were frequently bored and did not response well. Research assistant skills were important. As research assistants were 20 health volunteers, they could not always communicate well and lacked recoding skills. Therefore, they could not always get complete answers from all respondents. Moreover, health consequences could not be classified in 3 groups as low consequences, medium consequences and high consequences. Because researcher had some statistical problems when using chi-square, it showed that cells were not enough to compute.

CHAPTER IV

RESULTS

This chapter presents the results of the survey after the data collection, which was done among 334 households, 1 respondent in each household, at Thum Tong sub-district, Muang Nan district, Nan province, Thailand. The results of data analysis are reported to the following sub-headings;

- 4.1 Socio-demographic characteristics.
- 4.2 Alcohol drinking situation.
- 4.3 Perceptions and attitudes toward alcohol consumption.
- 4.4 AUDIT and health consequences of villagers.
- 4.5 Association between socio-demographic factors and alcohol drinking patterns with health consequences.
- 4.6 Qualitative study about health consequences.

4.1 Socio-demographic characteristics

4.1.1 Household profile

The socio-demographic characteristics variables were sex, age and marital status. There were a total of 1,012 people in 334 households. Males (51.4%) and females (48.6%) were nearly equal distribution (Table 4.1). The majority of the population (60.9%) was aged 40 years and older age group. The average age of the population was 45 years. Marital status of the respondents was predominantly (64.0%) married.

Table 4.1: Number and percentage distribution of the population in household by socio-demographic characteristics

Socio-demographic Characteristics	Male (n=520)		Female (n=492)		Total (N=1,012)	
	n	%	n	%	N	%
Age (years)						
0 – 14	64	12.3	59	12.0	123	12.2
15 – 19	40	7.7	40	8.1	80	7.9
20 – 24	24	4.6	22	4.5	46	4.5
25 – 29	21	4.0	10	2.0	31	3.1
30 – 34	24	4.6	28	5.7	52	5.1
35 – 39	35	6.7	29	5.9	64	6.3
40 – 44	38	7.3	70	14.2	108	10.7
45 – 49	72	13.8	79	16.1	151	14.9
50 – 54	65	12.5	60	12.2	125	12.4
55 – 59	58	11.2	30	6.1	88	8.7
60 and above	79	15.2	65	13.2	144	14.2
Total	520	100.0	492	100.0	1,012	100.0
Median = 45.0, Mean = 40.77, SD = 18.918						
Marital status						
Single	158	30.4	142	28.9	300	29.6
Married	340	65.4	308	62.6	648	64.0
Widow	13	2.5	36	7.3	49	4.8
Divorced	9	1.7	6	1.2	15	1.5
Total	520	100.0	492	100.0	1,012	100.0

Table 4.2 showed alcohol drinking behavior distribution of population in households. Half of them (50.5%) were current drinkers while 36.8% had never drunk. With regard to the distribution by sex, there were current drinkers who were male (63.8%) compared to female (36.4%).

Table 4.2: Number and percentage distribution of population in household by alcohol drinking behavior

Alcohol drinking behavior	Male (n=520)		Female (n=492)		Total (N=1,012)	
	n	%	n	%	N	%
Current drinkers	332	63.8	179	36.4	511	50.5
Former drinkers	77	14.9	52	10.6	129	12.7
Never drinkers	111	21.3	261	53.0	372	36.8
Total	520	100.0	492	100.0	1,012	100.0

* Current drinkers who drank in past twelve months.

* Former drinkers drank but stop drinking more than past twelve months.

4.1.2 Respondents profile

The socio-demographic characteristics of respondents were presented in table 4.3. There were male more than female (213 versus 121 people). (Table 4.2) Most of respondents were aged group 40 years and older (77.9%). With respect to the distribution by sex, male (79.4%) and female (75.2%) were in age group 40 years and older. Regarding family status, half of them (50.9%) were the head of the household. About 78% of respondents were married. Out of respondents (61.6%) were finished primary school. Among respondents (38.3%) worked as unskilled employee such as day worker in rice fields or soy fields, house gardening and followed by farmer with 33.5%. Male worked as a farmer 37% while female worked as unskilled employee 42.1%. The average monthly income was around 5,000 baht.

Table 4.3: Number and percentage distribution of respondents by socio-demographic characteristics

Socio-demographic Characteristics	Male (n=213)		Female (n=121)		Total (N=334)	
	n	%	n	%	N	%
	Age (years)					
18 – 24	11	5.2	8	6.6	19	5.7
25 – 29	4	1.8	2	1.7	6	1.8
30 – 34	7	3.3	9	7.4	16	4.8
35 – 39	22	10.3	11	9.1	33	9.8
40 – 44	17	8.0	21	17.3	38	11.3
45 – 49	48	22.5	33	27.3	81	24.3
50 – 54	40	18.8	14	11.6	54	16.2
55 – 59	34	16.0	13	10.7	47	14.1
60 and above	30	14.1	10	8.3	40	12.0
Total	213	100.0	121	100.0	334	100.0
Median = 48.0 , Median = 46.93 , SD = 10.713						
Family status						
Head of household	169	79.3	1	0.8	170	50.9
Spouse	3	1.4	99	81.8	102	30.5
Children	29	13.6	11	9.1	40	12.0
Parents	10	4.7	7	5.8	17	5.1
Sister or brother	2	0.9	3	2.5	5	1.5
Total	213	100.0	121	100.0	334	100.0
Marital status						
Single	29	13.6	14	11.6	43	12.8
Married	173	81.2	88	72.7	261	78.2
Widow	8	3.8	10	8.3	18	5.4
Divorced	3	1.4	9	7.4	12	3.6
Total	213	100.0	121	100.0	334	100.0

Table 4.3 (continued)

Socio-demographic Characteristics	Male		Female		Total	
	(n=213)		(n=121)		(N=334)	
	n	%	n	%	N	%
Education						
No education	1	0.5	2	1.7	3	0.9
Primary school	136	63.8	70	57.9	206	61.6
Secondary school	25	11.7	26	21.6	51	15.3
High school	29	13.6	12	9.6	41	12.3
> High school	32	10.4	11	9.2	33	9.9
Total	213	100.0	121	100.0	334	100.0
Occupation						
Unskilled employee	78	36.6	51	42.1	128	38.3
Farmer	78	36.6	34	28.1	112	33.5
Civil servant	14	6.6	5	4.1	19	5.7
Office worker	19	8.9	10	8.3	29	8.7
Shop owner	18	8.5	11	9.1	29	8.7
Housewife	0	0.0	8	6.6	9	2.7
Student	6	2.8	2	1.7	8	2.4
Total	213	100.0	121	100.0	334	100
Income (baht/month)						
1 – 5,000	137	66.5	97	80.8	234	71.8
5,001 – 10,000	47	22.8	17	14.2	64	19.6
10,001 – 15,000	14	6.8	3	2.5	17	5.2
15,001 – 20,000	3	1.5	0	0.0	3	0.9
20,000 and above	5	2.4	3	2.5	8	2.5
No income	5	-	3	-	8	-
Total	206	100	120	100	326	100
Mean = 4,978.04 , Median = 5,616.86 , SD = 4,989.653						

4.2 Alcohol drinking situation

Table 4.4 showed pattern of alcohol drinking among respondents. The majority of respondents (68.9%) were current drinkers. Only 8.4% of them were never drinkers. Three out four males and more than half of female (58.7%) were current drinkers. The average age of drinkers was 47 years. Most of the respondents were aged 40 years and older with 75.7% with more male drinkers (76.1%) compared to female (74.7%). The first age of drinker was 14 years old.

Table 4.4: Number and percentage distribution of respondents by patterns of alcohol use

Alcohol drinking profile	Male		Female		Total	
	n	%	n	%	N	%
Alcohol drinking behavior in past 12 months (N=334)						
Current drinkers	159	74.6	71	58.7	230	68.9
Former drinkers	41	19.2	35	28.9	76	22.8
Never drinkers	13	6.1	15	12.4	28	8.4
Total	213	100	121	100.0	334	100.0
Age of drinker (years) (N=230)						
18 – 24	11	6.9	7	9.8	18	7.8
25 – 29	4	2.5	1	1.4	5	2.2
30 – 34	6	3.8	4	5.6	10	4.3
35 – 39	17	10.7	6	8.5	23	10.0
40 – 44	14	8.8	12	16.9	26	11.3
45 – 49	36	22.7	22	31.0	58	25.2
50 – 54	28	17.6	7	9.9	35	15.2
55 – 59	29	18.2	7	9.9	36	15.7
60 and above	14	8.8	5	7.0	19	8.3
Total	159	100.0	71	100.0	230	100
Median = 47.0 , Mean= 45.91 , SD = 10.981						

Table 4.5 showed alcohol drinking behavior, the majority of drinkers (78.7%) drank twice a month while 0.4% of drinkers drank almost every day. This pattern is consistent with the pattern in both males and females. Regarding quantity of drinking, seven out of ten (72%) female drank more than 4 standard drinks per occasion and about 77% of male drank more than 5 standard drinks per occasion. Nearly half of drinkers (49.1%) drank white spirits and followed by beer (40.0%). Male drinkers (57.2%) drank white spirits while female (54.9%) drank beer.

Table 4.5: Number and percentage distribution of drinkers by patterns of drinking

Patterns of alcohol drinking	Male (n=159)		Female (n=71)		Total (N=230)	
	n	%	n	%	N	%
Frequency of alcohol drinking						
Once a month	1	0.6	2	2.8	3	1.3
Twice a month	122	76.7	59	83.1	181	78.7
Once a week	36	22.7	9	12.7	45	19.6
Almost every day	0	0	1	1.4	1	0.4
Total	159	100.0	71	100.0	230	100.0
Quantity of drinking						
< standard drink	37	23.3	20	28.2	57	24.78
> standard drink	122	76.7	51	71.8	173	75.22
Total	159	100	71	100.0	230	100.0
Types of alcohol drinking						
White spirits	91	57.2	22	31.0	113	49.1
Whisky	15	9.4	10	14.1	25	10.9
Beer	53	33.4	39	54.9	92	40.0
Total	159	100.0	71	100.0	230	100.0

Alcohol drinking with friends showed in Table 4.6. Most of them (90.0%) drank with friends. Half of them (51.2%) drank white spirits and followed by beer with 34.8%. Out of male (61.5%) drank white spirits while 56% of female drank beer. With respecting sex to standard drinks, both of male and female drank more than standard drink per occasion with 66.9% and 63.7% respectively.

Table 4.6: Number and percentage distribution of drinkers by alcohol drinking with friends

Characteristics	Male		Female		Total	
	n	%	n	%	N	%
Drank with friends in past 12 months (N=230)						
Yes	148	93.1	59	83.1	207	90.0
No	11	6.9	12	16.9	23	10.0
Total	159	100.0	71	100.0	230	100.0
Types of alcohol drinking (N=207)						
White spirits	91	61.5	15	25.4	106	51.2
Whisky	18	12.1	11	18.7	29	14.0
Beer	39	26.4	33	55.9	72	34.8
Total	148	100.0	59	100.0	207	100.0
Quantity of drinking (N=207)						
< standard drink	49	33.1	22	37.3	71	34.3
> standard drink	99	66.9	37	63.7	136	65.7
Total	148	100	59	100.0	207	100.0

Alcohol drinking with family showed in table 4.7. Most of them (86.5%) had never drunk with family while only 13.5% had ever drunk. Nearly half of them (45.2%) drank beer and followed by white spirits (35.5%). Male drinkers (43.8%) drank white spirits while female drinkers (60.0%) drank beer. More than half of male (56.2%) and female (53.3%) drank more than standard drink per occasion.

Table 4.7: Number and percentage distribution of drinkers by alcohol drinking with family

Characteristics	Male		Female		Total	
	n	%	n	%	N	%
Drank with your family in past 12 months (N=230)						
Yes	17	10.7	14	19.7	31	13.5
No	142	89.3	57	80.3	199	86.5
Total	159	100.0	71	100.0	230	100.0
Types of drink (N=31)						
Beer	5	31.2	9	60.0	14	45.2
White spirits	7	43.8	4	26.7	11	35.5
Spirit	3	18.8	2	13.3	5	16.1
Whisky	1	6.2	0	0	1	3.2
Total	16	100.0	15	100.0	31	100.0
Quantity of drinking (N=207)						
< standard drink	7	43.8	7	46.7	14	45.2
> standard drink	9	56.2	8	53.3	17	54.8
Total	16	100.0	15	100.0	31	100.0

Most of drinkers (86.6%) drank during Songkran festival with 89.9% of male and 78.9% of female (Table 4.8). About 56% of drinkers drank with friends while only 2% of them drank with visitors. Respecting their place to drink, half of them (50.8%) drank at home while 41.7% drank at neighbor's house. Most of male (76.9%) and female drinkers (73.2%) drank more than the standard numbers of drinks per occasion. Regarding types of drink, about 41% of drinkers drank beer and followed by white spirits (34.0%). Male drinkers (39.2%) drank white spirits while 55.3% of female drank beer.

Table 4.8: Number and percentage distribution of drinkers by alcohol drinking during Songkran festival

Characteristics	Male		Female		Total	
	n	%	n	%	N	%
Drank during Songkran festival last year (N=230)						
Yes	143	89.9	56	78.9	199	86.6
No	16	10.1	15	21.1	31	13.5
Total	159	100.0	71	100.0	230	100.0
Drank with (N=199)						
Friends	83	58.0	28	50.0	111	55.8
Family or cousins	37	25.9	18	32.1	55	27.6
Neighbors	22	15.4	9	16.1	31	15.6
Visitors	1	0.7	1	1.8	2	1.0
Total	143	100.0	56	100.0	199	100.0
Place to drink (N=199)						
Own house	70	49	31	55.4	101	50.8
Neighbors' house	62	43.4	21	37.5	83	41.7
Rice field	9	6.3	1	1.8	10	5.0
Office	0	0	1	1.8	1	0.5
Restaurant	2	1.4	2	3.6	4	2.0
Total	143	100.0	56	100.0	199	100.0
Quantity of drinking (N=199)						
< standard drink	33	23.1	15	26.8	48	24.1
> standard drink	110	76.9	41	73.2	151	75.9
Total	143	100	56	100.0	199	100.0

Table 4.8 (continued)

Characteristics	Male		Female		Total	
	n	%	n	%	N	%
Types of drink (N=199)						
Beer	51	35.6	31	55.3	82	41.2
White spirits	56	39.2	12	21.4	68	34.2
Whisky	36	2.8	13	5.4	49	3.5
Total	143	100.0	56	100.0	199	100.0

Seventy percent of the drinkers drank during New Year festival. There were more males (71.7%) compared to females (67.6%) who drank during this celebration. (Table 4.9) More than half of them (53.7%) drank with friends and followed by family or cousins (24.1%). About 53% of drinkers drank at neighbor's houses while 43.8% drank at home. Only 0.6% drank at office or restaurant. About 68% of male and 75% of female drank more than the standard number of drinks. One third of drinkers drank beer (37.1%) and white spirits 930.2%) but only 4.9% drank whisky. Male drinkers (37%) drank white spirits while 52.1% female drank beer.

Table 4.9: Number and percentage distribution of drinkers by alcohol drinking during New Year festival

Characteristics	Male		Female		Total	
	n	%	n	%	N	%
Drank during last New Year festival (N=230)						
Yes	114	71.7	48	67.6	162	70.4
No	45	28.3	23	32.4	68	29.6
Total	159	100.0	71	100.0	230	100.0

Table 4.9 (continued)

Characteristics	Male		Female		Total	
	n	%	n	%	N	%
Drank with (N=162)						
Friends	61	53.5	26	54.2	87	53.7
Family or cousins	28	24.6	11	22.9	39	24.1
Neighbors	25	21.9	11	22.9	33	22.2
Total	114	100.0	48	100.0	162	100.0
Place to drink (N=162)						
Neighbors' house	56	49.1	29	60.4	85	52.5
Own house	56	49.1	15	31.2	71	43.8
Rice field	2	1.8	2	4.2	4	2.5
Office	0	0	1	2.1	1	0.6
Restaurant	0	0	1	2.1	1	0.6
Total	114	100.0	48	100.0	162	100.0
Quantity of drinking (N=162)						
< standard drink	37	33.5	12	25.0	49	30.2
> standard drink	77	67.5	26	75.0	113	69.8
Total	114	100.0	48	100.0	162	100.0
Types of drink (N=162)						
Beer	35	30.7	25	52.1	60	37.1
White Spirits	42	36.8	7	14.6	49	30.2
Whisky	37	2.6	16	10.4	53	4.9
Total	114	100.0	48	100.0	162	100.0

4.3 Perceptions and attitude towards alcohol consumption

The perception of alcohol drinking was asked all respondents. Their perceived about alcohol consuming that more than half of villagers always drink during festivals such as New Year, Songkran with 51.8%. (Table 4.12) One third of respondents' perceived that people always drink during special occasions. Only 4.2% of them perceived that people always drink with families. This pattern was consistent between male and female respondents.

Table 4.10: Number and percentage distribution of respondents by perceptions towards alcohol drinking

Characteristics	Male (n=213)		Female (n=121)		Total (N=334)	
	n	%	n	%	N	%
	Over the past year, what do you think is the best statement that best reflects with alcohol drinking situation in your villages?					
Always drink during festivals	117	54.9	56	43.6	173	51.8
Always drink during special occasions	81	38.0	42	34.7	123	38.6
People seldom drink	10	4.7	14	11.6	24	7.2
Always drink with families	5	2.3	9	7.4	14	4.2
Total	213	100.0	121	100.0	334	100.0

According to attitudes toward drinking alcohol, there were 5 significant negative attitudes toward drinking alcohol that influenced Thum Tong villagers to drink and which may lead the health problems. Firstly, around 37% agreed that alcohol drinking can release stress and make them feel fresh. Respecting their rural area and their culture, if people agree with this attitude, they may drink when they get stressed and also drink daily after work to help them feel refreshed or relieve pain.

Secondly, 29.3% of respondents agreed that drinking beer or wine is safer than drinking spirits. Beer, wine or spirits also can cause health problems but it depends on the quantity of drinking. If people agree with this attitude, they will drink more beer or wine. This was consistent with female drinkers that preferred to drink beer. Thirdly, half of them disagreed that if they know how to drink, they won't get drunk. It showed that people could not control their drinking and they could not stop drinking once they started. Fourthly, about 30% of them agreed that they drink alcohol for social purposes. The results of this study revealed that drinkers drank more during Songkran and New Year festivals. People serve alcoholic beverages to welcome guests into their homes, to parties and especially to festivals. If people agree with this attitude, it will increase the social behavior in villages. Finally, the majority of respondents (66.5%) agreed that drinking alcohol is an individual's right and not other's business. The results of this study also indicate that alcohol drinking affects not only an individuals' health, but also their family and community/society. If people agree with this attitude, they will drink more in the future. Because they will think that it is their private business and they will not realize that when they have problems, it might be affect both their family and society.

Table 4.11: Number and percentage distribution of respondents by attitude towards alcohol drinking

Attitude towards alcohol drinking	Male		Female		Total	
	(n=213)		(n=121)		(N=334)	
	n	%	n	%	N	%
1. Drinking alcohol is good for health.						
Agree	29	13.6	6	5.0	35	10.5
Disagree	168	78.9	102	84.3	270	80.8
Not sure	16	7.5	13	10.7	29	8.7
2. Drinking alcohol cannot release your stress or make you feel fresh.						
Agree	108	50.7	56	46.3	164	49.1
Disagree	73	34.3	52	43.0	125	37.4
Not sure	32	15.0	13	10.7	45	13.5
3. Drinking beer and wine is safer than drinking spirits.						
Agree	77	33.3	27	22.3	98	29.3
Disagree	78	66.7	67	55.4	145	43.4

Not sure	64	30.0	27	22.3	91	27.3
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Table 4.11 (continued)

Attitude towards alcohol drinking	Male		Female		Total	
	(n=213)		(n=121)		(N=334)	
	n	%	n	%	N	%
4. You know how to drink so you won't get drunk.						
Agree	61	28.6	24	19.8	85	25.4
Disagree	99	46.5	78	64.5	177	53.0
Not sure	53	24.9	19	15.7	72	21.6
5. Drinking alcohol can't keep you warm.						
Agree	111	52.1	87	71.9	198	59.2
Disagree	47	22.1	16	13.2	63	18.9
Not sure	55	25.8	18	14.9	73	21.9
6. Drinking alcohol can't help sexual desires.						
Agree	114	53.5	90	74.4	204	61.1
Disagree	78	35.7	27	22.3	103	30.8
Not sure	23	10.8	4	3.3	27	8.1
7. Drinking a small amount of alcohol is fine and will not cause any health problems.						
Agree	138	64.8	65	53.7	203	60.7
Disagree	44	20.7	21	17.4	65	19.5
Not sure	31	14.5	35	28.9	66	19.8
8. Drinking alcohol is for self learning or social purpose.						
Agree	80	37.6	21	17.4	101	30.2
Disagree	91	42.7	67	55.4	158	47.3
Not sure	42	19.7	33	27.3	75	22.5
9. Drinking alcohol is an individual right not other's business.						
Agree	150	70.4	72	59.5	222	66.5
Disagree	27	12.7	22	18.2	49	14.7
Not sure	36	16.9	27	22.3	63	18.9
10. Drinking alcohol can cause family relationship problems.						
Agree	172	80.8	103	85.1	275	82.3
Disagree	19	8.9	8	6.6	27	8.1
Not sure	22	10.3	10	8.3	32	9.6
11. A country cannot be rich by sin taxes.						
Agree	123	57.7	71	58.7	194	58.1
Disagree	35	16.4	15	12.4	50	15.0
Not sure	55	25.8	35	28.9	90	26.9

Table 4.11 (continued)

Attitude towards alcohol drinking	Male (n=213)		Female (n=121)		Total (N=334)	
	n	%	n	%	N	%
12. Children should not drink alcohol even if just a small amount.						
Agree	194	91.1	110	90.9	304	91.0
Disagree	17	8.0	11	9.1	28	8.4
Not sure	2	0.9	0	0	2	0.6
13. The “No drinking in public” policy of Thum Tong sub-district allows drinking alcohol at temples or funerals.						
Agree	40	18.8	11	9.1	51	15.3
Disagree	154	72.3	103	85.1	257	76.9
Not sure	19	8.9	7	5.8	26	7.8
14. Serving alcohol at funerals in Thum Tong sub-district is allowed to welcome guests.						
Agree	25	11.7	3	2.5	28	8.4
Disagree	172	80.8	113	93.4	285	85.3
Not sure	16	7.5	5	4.1	21	6.3
15. An alcohol-free sports day policy can reduce accidents and fighting and it makes sport competition less fun.						
Agree	154	72.3	100	82.6	254	76.0
Disagree	48	22.5	20	16.5	68	20.4
Not sure	11	5.2	1	0.8	12	3.6

4.4 AUDIT and health consequences of villagers

Alcohol Use Disorders Identification Test (AUDIT) is a tool that was developed by WHO as simple method of screening for excessive drinking and to assist in brief assessment (43). It can help identify excessive drinking as the cause of the present illness and can provide a framework for intervention to help risky drinkers reduce or cease alcohol consumption. There are four categories based on the AUDIT scores (Table 4.14).

The results showed that the majority of drinkers (63%) were categorized as hazardous drinkers. “Hazardous drinkers” refers to drinkers who drank 4 – 6 standard

drinks for men and 2 – 4 standard drinks for women. One out of ten drinkers was considered as a harmful drinker and alcohol dependent with 8.7% and 2.2% respectively. Harmful drinkers refer to alcohol drinking, more than 6 standard drinks in men and more than 4 standard drinks in women while alcohol dependent refers to a cluster of behavioral, cognitive and physiological phenomena. With regards to distribution by sex, most male drinkers (70.4%) were categorized as hazardous drinkers. On the other hand, the proportion of hazardous drinkers (46.5%) and low risk drinkers (45.1%) among female were nearly equal. This shows that drinking alcohol is still prevalent in villages and that people consume alcoholic beverages in large quantities. This results in alcohol-related health problems and additionally, hazardous drinkers can become harmful drinkers and alcohol dependent in the end.

Table 4.12: Number and percentage distribution of drinkers by AUDIT

AUDIT levels	Male (n=159)		Female (n=71)		Total (N=230)	
	n	%	n	%	N	%
Low risk (0-7)	28	17.1	32	45.1	60	26.1
Hazardous drinker (8-15)	112	70.4	33	46.5	145	63.0
Harmful drinker (16-19)	15	9.4	5	7.0	20	8.7
Alcohol dependence (20-40)	4	2.5	1	1.4	5	2.2
Total	159	100.0	71	100.0	230	100.0

4.5 Association between socio-demographic factors and alcohol drinking patterns with health consequences.

Health consequences refer to health problems caused by alcohol consumption. Respondents were asked to report the accidents, violence, physical, mental, social and legal effects they experienced while drinking. A maximum of 15 consequences could be identified. The analysis of the responses reported that the mean score when it came to health consequences was 3.635. This showed that, on the average, the respondents who drank experienced 4 health consequences when they drank.

Health consequences were further classified into two categories by using mean score to be the cut point. Therefore scores between 0 and 4 were categorized as low and scores greater than 4 as high. A significant proportion of drinkers 69.1% experienced low health consequences while the rest had high consequences. The results of classification are presented as the table below.

Table 4.13 Number and percentage distribution of drinkers by health consequences.

Health consequences	n	%
Low consequences (score0 – 4)	159	69.1
High consequences (5-15)	71	30.9
Total	230	100.0

There were 6 variables for socio-demographic and 3 variables of alcohol consumption pattern (Table 4.15) use in this analysis. Sex, educational attainment, occupation and income were found to be associated with the intensity of health consequences. With regards to alcohol consumption variables, the types of drinking as well as the frequency of drinking were found to be associated.

Table 4.14 Association between socio-demographic factors and alcohol consumption patterns with health consequences.

Characteristics	Low	High	χ^2	p-value
	consequences n (%) (n=159)	consequences n (%) (n=71)		
Sex				
• Male	101(63.5)	58(81.7)	7.592	0.006
• Female	58(36.5)	13(18.3)		
Age (years)				
• 18 – 29	15(9.4)	8(11.3)	3.456	0.174
• 30 – 54	111(69.8)	41(57.7)		
• >54	33(20.8)	22(31.0)		

Table 4.14 (continued)

Characteristics	Low	High	χ^2	p-value
	consequences	consequences		
	n (%) (n=159)	n (%) (n=71)		
Marital status				
• Single	26(16.4)	8(11.5)	4.454	0.198
• Married	126(79.2)	56(78.9)		
• Divorced	5(3.1)	3(4.2)		
• Widow	2(1.3)	4(5.6)		
Income (baht)				
• 0 – 5,000	128(80.5)	46(64.8)	7.291	0.025
• 5,001 – 10,000	23(14.5)	21(29.6)		
• > 10,000	8(5.0)	4(5.6)		
Occupation				
• Unskilled employee	66(41.5)	22(31.0)	10.972	0.044
• Farmer	62(39.0)	25(35.2)		
• Civil servant	5(3.1)	1(1.4)		
• Office worker	6(3.8)	8(11.3)		
• Shop owner	11(6.9)	12(16.9)		
• Housewife, student	9(5.7)	3(4.2)		
Education				
• No education – primary school	121(76.1)	61(85.9)	5.723	0.045
• Secondary – high school	28(17.6)	10(14.1)		
• > high school	10(6.3)	0		

Table 4.14 (continued)

Characteristics	Low	High	χ^2	p-value
	consequences	consequences		
	n (%) (n=159)	n (%) (n=71)		
Types of drinking				
• White spirit	69(43.4)	44(62.0)	10.716	0.004
• Whisky	23(14.5)	2(2.8)		
• Beer	67(42.1)	25(35.2)		
Quantity of drinking				
• 1- 4 drinks	49(30.8)	16(22.5)	1.661	0.198
• > 4 drinks	110(69.2)	55(77.5)		
Frequency of drinking				
• \leq a month	113(71.1)	71(100)	25.676	< 0.001
• \geq a week	46(28.9)	0		

p-value significant ≤ 0.05

AUDIT scores was found to be positively correlated with health consequences scores ($\rho=0.279$, $p<0.001$).

จุฬาลงกรณ์มหาวิทยาลัย

4.6 Qualitative study about health consequences of alcohol drinking

In this study, qualitative data was collected by using questionnaires. 230 of the 334 respondents were current drinkers. They were asked to describe questions about situations involving drinking alcohol, consequences of and attitudes towards drinking alcohol and the impact of alcohol consumption on family and community. The results clearly indicate that drinking alcohol affects not only individuals' health, but also their family and community/society.

4.6.1 Health consequences of drinkers

The severity of health consequences depended on the amount of alcohol consumed. Among low risk drinkers, the short-term effects of alcohol occurred quickly after drinking. When they drank, their faces turned red. Additionally, most drinkers became talkative and spoke louder than usual. Also, they reported that they felt sleepy, staggered when they tried to walk and got nauseous and had headaches. After drinking, most of them reported that they could still work or continue with their normal routines the next day. Only a few people suffered hangovers (including headaches) and could not eat.

“After drinking, I had got a terrible headache. Then, I went to see a nurse at the health care center to check my blood pressure. I found that I had high blood pressure even if I drank only a small beer. A nurse told me to stop drinking and I knew that I had to stop for my health”.

(A male drinker with hypertension)

Effects of alcohol on hazardous drinkers were usually similar to those experienced by low risk drinkers. However, more symptoms were reported. Hazardous drinkers indicated that they had slurred speech. They could not go back home by themselves. After drinking, they said that they had hangovers and headaches. They could not eat any food but were only able to consume water or sweet drinks because they would feel nauseous after eating. They could not work the next day, only sleep and rest. Some of them stated that they could not remember what they had done

when they were drinking and did not remember how they could get home. Some drinkers also said that they had a fever and their entire body was in pain.

“I was so sad and felt guilty because my son had an accident after drinking. He drank with friends at a small restaurant after work. Then he came home and wanted to continue drinking with friends at his friend’s house. I was thinking I should tell him not to go but I did not. After that he had a motorcycle accident and was admitted to Nan hospital for 6 months. He is paralyzed and even now he cannot walk or sit properly. Drinking alcohol destroyed his life and his future”

(A 56-year-old man)

For harmful drinkers, the effects of drinking were similar to those of hazardous drinkers. Some additional symptoms related by harmful drinkers are that, even if they drank only water or sweet drinks, they vomited immediately after drinking. Some of them felt as if they had a fever. Drinkers revealed that they were so drunk that they simply slept at the place where they were drinking. The day after drinking, some of them had no noticeable effects so that they could work normally. Since they thought that alcohol had no effect on them, harmful drinkers continued their drinking behavior.

“I did not have a hangover or any symptoms after drinking white spirits, no headache, but of course I was very drunk. But the next day when I woke up, I felt like I was ok and could work and go about my normal routine. So I usually drink white spirits.”

(A 45-year-old man)

Respondents with alcohol dependency had the most severe effects since they drank a large amount of alcohol. Some of them experienced gastritis, vomiting and headaches but after sleeping, they felt fine. Alcohol dependent drinkers also told that they became aggressive. Some of them said that they had no symptoms.

“I drank white spirits everyday because I worked hard. I was so drunk but I knew what I had done. I did not have a hangover. I thought my body was getting used to it.”

(A 58-year-old woman)

4.6.2 Impacts of alcohol drinking on family

Most drinkers revealed that their family members wanted them to stop drinking. Drinking alcohol made family members worried about the health consequences of drinkers. Importantly, some male drinkers revealed that they had quarreled with their wives because of drinking a lot of alcohol. Some drinkers did not go back home because they were drunk, so they simply slept at the place they were drinking. There were several cases of drinkers being blamed for family problems or destroying property by wives, daughters, sons, and parents since those family members wanted them to stop drinking. As told by drinkers, family members expressed their concerns not only about health problems, but also expenditures for buying alcohol, quarreling and fighting, accidents, being a bad role model for children and conflicts in the family. There was an interesting case of a boy who got in a motorcycle accident because of riding while drunk. The problems created a burden for his parents who took him to the hospital, cared for him closely and paid for his medical treatment. The following describes another case of having a family problem due to drinking alcohol.

“My daughter wanted me to stop drinking because I was admitted to the hospital 2 months ago after drinking with friends. She said that she did not want me to die because she wanted to live with me and my wife for long time. So she put the poster about stopping drinking from Family Network in my bedroom. She thought it would remind me to stop drinking or to drink less”

(A 59-year-old man)

“My wife wanted me to stop drinking because she was afraid that I wouldn't have money to pay for my kids for registration for the new school. Because when I drank, I could not stop and I spent a lot of money for drinking”

(A 45-year-old-man)

4.6.3 Impacts of alcohol drinking on community/society

Social impacts of alcohol were implied when drinkers explained more about what happened to them and other people after drinking and they could not control themselves. In situations where they could not go back home when they got drunk,

they caused troubles for the owner of the place they drank. When they got drunk and talked loudly, neighbors also complained. Additionally, fighting among drinkers created difficulties for owners of restaurants and for the police. Drunk driving caused accidents affecting other street users and also destroyed public assets in the community.

“My kids could not sleep when they drank. They played music even louder when I came to talk with them. We quarreled because they said that they drank at their house and so I should not complain about anything. After that, my family and his family did not talk anymore.

(A 42-year-old-woman)



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

CHAPTER V

DISCUSSION

The purpose of this study was to identify and characterize the situation of alcohol consumption among villagers and its health consequences in Thum Tong sub-district, Muang Nan district, Nan province, Thailand. Research findings were discussed as below.

Based on the AUDIT scores of respondents indicated that the majority of drinkers were categorized as hazardous drinkers. Male hazardous drinkers were higher than female. Regarding males drank more than females. Therefore male drinkers would have more health problems caused by alcohol drinking than female. Hazardous drinkers could develop to be harmful drinkers or alcohol dependence. This was contrast with AUDIT report by Thum Tong sub-district health care center that the majority of respondents were categorized as low risk and the percentage of hazardous, harmful and alcohol dependent were 14.67% (28). Because people who got interviewed by AUDIT question were patients and almost of them were elderly people. They were sick and they did not drink. Therefore they were reported as low risk drinkers. On the other hand, this was consistent with a study of alcohol habits in Sweden during 1997-2009 with particular focus on the years 2005 and 2009 by Kallmen H., et.al in 2010. Their study revealed that men had higher total AUDIT scores than women in 2005 and 2009 while scores increased among women but decreased among men. (54) A study of binge drinking by Kanny (44) also showed that hazardous drinkers could become harmful drinkers and alcohol dependence. Drinkers might have some problems with their health. As results by qualitative analysis by affection of hazardous drinkers showed that drinkers usually felt their face became red, talkative, slurred speech, couldn't remember event during drinking and sleepy problems. In the 2010 study of Vinson, et.al on alcohol and sleep problems in primary care patients, their findings revealed that moderate and hazardous drinking was associated with few sleep problems. (55) Mattiko, et.al in 2011 showed that higher levels of drinking were associated with higher rates of alcohol problems and heavy drinkers also had the highest risk for alcohol problems on the AUDIT. (56) In

the results by qualitative study also reveal that drinkers in higher of AUDIT level had more health problems after they drank.

The profile of all respondents in this study showed that male respondents were greater than female. Almost of the respondents were in adult aged group, 40 years and older. Half of them were head of households. Marital status was predominant married. 61.6% of respondents were finished in primary school. Regarding occupation, seven out of ten respondents were unskilled employees and farmers. The majority of their income was lower than 5,000 baht. When it came with alcohol drinking behavior, about 70% of respondents were current drinkers. Drinkers drank more during festival such as New Year or Songkran. Friends were influenced for alcohol drinking. Most of them drank in villages as visiting friends or cousins for party and make good relationship. The results showed that male drinkers drank more compared to their female counterparts. In the qualitative analysis found that alcohol drinking was a social event. Male drinkers had more chances to drink than females. Males drank after working in their farm or rice fields. While females drinkers had to come home to take care of their children after work. Male drank as the head of household to welcome friends, cousins or neighbors during festivals. On the other hand, females had to cook, serving food and take care of them. Male drinkers were more acceptable compared to females. People thought that males drank for social purpose while females should not drink and be home to take care of their houses and children. The finding was consistent with a study by Kanny, et.al in 2010 on binge drinking where they found that the binge drinking prevalence in the United States among men was two times higher compared to women and the average largest number of drinks consumed (8.5 versus 5.7, respectively) (44). The result of National Statistical Office (NSO, 2007) in Thailand also reported that male drinkers were six times higher than female and the majority of drinkers were in age adult group (34.4%) (45) The study of the influence of gender and neighborhoods deprivation on alcohol consumption by Matheson.et.al in 2011 also revealed that the average number of drinking per week male (7.9 per capita) was greater than female (4.6 per capita) (46).

Majority of drinkers were in aged 40 years and older. Drinkers could earn income and spent their money by drinking alcohol. Workers in this aged group drank after work. From the results of qualitative analysis reveal that people thought drinking after work could help them relax and release pain. This was consistent with a study by Susumu.et.al on relationship between age and drinking patterns and drinking problems among Japanese, Japanese-Americans, and Caucasians in 2006 revealed that Japanese have consumed more alcohol and had a higher proportion of heavier drinkers in the adult age groups; the association between age and drinking problems also varied in this group (47) Another study also revealed that increasing age was associated with increased odds of being a current drinker in about half of the countries by Martine.et.al in 2011. (48) This was consistent with the result of National Statistical Office (NSO, 2007)in Thailand showed that the majority of drinkers were in age adult group. (45)

With regards to the quantity of drinking, both male and female drinkers drank more than the standard number of drinks per occasion. Furthermore, male drinkers drank more than female drinkers. Male drinkers could drink more than females. The results in the study found that when males started drinking. They could not stop and they wanted to drink more and went to many places. Some of them drank until drunk. While female knew how to drink. They stopped drinking when they knew that they were nearly drunk. Main reason females had to take care of their families and children therefore their probability of female drinkers was less than male. This was similar with a study by Ronaldo.et.al of alcohol use patterns among Brazilian adults in 2009 revealed that male drinkers (38%) drank more standard drinks per occasion than female (29%). (49)

Respect to types of drink in this study, favorite alcohol beverages were white spirit and followed by beer. Male preferred to drink white while half of female drinkers drank beer. According to their income, drinkers could earn small income. Moreover white spirit was available and cheaper compared to other alcoholic beverages. Therefore people drank more in white spirit. The results by qualitative study showed that drinkers had positive attitude towards drinking white spirit that it

would not make you hangover unlike drinking whisky or beer and drinkers drank. After work in their farms or rice fields, drinkers drank there therefore it was more convenience for them. Female preferred drinking beer because beer had lower alcohol degree therefore it would not make them too drunk. That was similar results in Thailand where NSO statistics showed that in 2007, the majority of types of drinking was beer (45.7%) and followed by white spirit and Thai whisky with 39.2% and 10.7% respectively. Female drinkers drank beer 59.6% while male drank beer and while spirit with 43.1% and 41.7% respectively (45).

Most of drinkers (90%) drank with their friends in past 12 months. That was consistent with both males and females. Drinking with friends could have more fun compared to drink with families. Drinkers could talk or had variety of conversation therefore they could drink more. Unlike drinking with families, children would be more scared to drink with their parents. Some of them did not want their parents know that they already started drinking. This finding was similar with a study by Paileeklee in 2010 of alcohol drinking behavior and economic cost incurred by users in Khon Kaen showed that most respondents drank for social activities, mainly with friends and relatives. Alcohol consumption is for social event. (50) A study in 2010 by Vinthur.et.al of alcohol use in Denmark: A descriptive study on drinking contexts revealed that more than 68% of the study population drank alcohol in social contexts, especially drinking with family and friends, or in party contexts. (51)

Almost all of the drinkers drank during festivals such as Songkran and New Year. From the qualitative results of the study revealed that Songkran and New Year were important to Thai people, especially Songkran. People were celebrating with their friends and families during the festivals. People visited their friends or relatives and the houses's owner served them with good food and alcoholic beverages. People who worked in other provinces came to visit their families therefore they had parties. This was consistent with a study by Sirirat of alcohol consumption among people in Chiang Mai in 2007 revealed that social drinking was a key motivation for alcohol consumption and it was also the reason the major motivation for consuming at the present time. 93.3% of the respondents consumed alcohol in Songkran Festival. (52)

Most of respondents perceived that other members of the villages always drink during festivals such as Songkran or New Year. That was consistent with the study by Paileeklee in 2010 that alcohol drinking was a social event and drinking alcohol during festival was acceptable in Thai culture (50). The attitude toward alcohol drinking also showed that people thought alcohol drinking is for social purpose.

The attitude towards alcohol drinking in this study showed that more than half of respondents had negative attitude towards alcohol drinking. People thought that drinking alcohol was not good for the health and could cause health problems such as illness, accidents, trouble with family relationship, friend, work or even study. In this study showed that some of them or their relatives were affected by alcohol drinking such as with their health, families and social. That was consistent with a study of alcohol consumption behavior among people in Chiang Mai by Sirirat in 2007 showed that the side effects of alcohol consumption that 45.5% of the respondents had accident after consuming alcohol. 35.3% had bodily harm (52). Around a third of them had positive attitude such as drinkers though that alcohol drinking was a social purpose and acceptable in villages. Therefore the results showed that serving alcoholic beverages and good food to welcome guests were acceptable in villages especially during festivals. Drinking alcohol could make them to have a better relationship even among friends or neighbors. The resulted of this study also similar with a study by Sirirat in 2007 that 62% of the respondents felt that consuming alcohol could release stress. 48.7% of the respondents felt that consuming alcohol could assist social relations. (52)

Even though people had negative attitudes towards alcohol drinking, they still drank alcohol drinking. This was consistent with a study by Ali in 2010 on the perception regarding alcohol and substance abuse in the community among medical students in Riyadh, Saudi Arabia. Their study revealed that 75% of students believed that alcohol and substance abuse is a common problem in the community and perceived that alcohol was the most commonly abused drug. Out of this 3% indicated that they may abuse alcohol or some other substance in the future. (53) Despite they seemingly had negative attitude towards alcohol drinking, this did not guarantee that these people would not start drinking. This showed that if people didn't realize or

positive attitudes and perceptions towards alcohol consumption, they would become drinkers or drank more.

From this study showed that sex, educational attainment, occupation and income were found to be associated with the intensity of health consequences. Among villagers, both males and females drank alcoholic beverage, even though male drinkers were greater than females. Drinkers had low education and low income. Therefore they worked as unskilled employee and farmer. Drinkers in these groups drank more alcoholic beverages. Because they worked hard and some of them thought that alcohol drinking could help them relief pain and could make them to sleep then they could work in the next day. Drinkers did not realize the health problems after alcohol drinking. The results of qualitative analysis also found that people had only short effects from drinking. They did not have diseases by alcohol consumption. Therefore they drank more. According to the studies, drinkers who consumed more alcohol drinking would have trouble with their health effects.

Male drinkers were affected by both low and high consequences compared to female. The results revealed that males drank more than females. Therefore they might have more health problems than female. That was consistent with a study by Janne in 2006 of prospective study of alcohol drinking patterns and coronary heart disease in women and men showed that men who drank alcohol on at least one day a week had a higher risk of coronary heart disease than women who drank alcohol on less than one day a week. (57) A study by Rebecca of alcohol and injury in Poland in 2010 revealed that men are more like to women for alcohol drinking. Alcohol is greatest one of risk factors for disease and injury among men and one of top ten health and injury risk factors among women. (58) A study by Levola., et.al of depression and heavy drinking occasions in 2011 also showed that 7.5% of men and 3.5% of women reported having at least four heavy drinking occasions in the previous 28days. In an adjusted logistic regression model, these men had a 2.6-fold risk (95% C.I. 1.2-5.3) of depression, as compared to men with less than four heavy drinking occasions. (59)

The drinker's educational attainment was associated with the intensity of health consequences that they experiences while drinking. In this study showed that

drinkers who had low education drank more than higher education. According to the rural area, people with low education might not be concerned about the health problems. Moreover the effects after alcohol drinking were short effects. Therefore drinkers might not realize about alcohol drinking. This was similar with a study by Kim, et.al in 2006 on found that in Germany, Netherlands, France, Switzerland, and Austria revealed that men with the lower educated were more at risk in most countries. For heavy episodic drinking, for men a social gradient was observable with lower educated being more at risk in several countries. (60)

Regarding occupation and income, in this study showed that one third of drinkers worked as farmer and unskilled employee. Income was associated with health consequences. In this study showed that drinkers drank more in these groups. If people drank more, they would have more health problems by alcohol consumption. That was consistent with a study in 2001 by Matheson on drinking in context: the influence of gender and neighbourhood deprivation on alcohol consumption revealed that men living in the poorest neighbourhoods and work as daily workers drank more weekly (8.5 drinks) than men living in neighbourhoods of wealthy (4.5 drinks) and mid-range deprivation (3.7 drinks). (46) A study by Katherine, M and Deborah, S. on socio-economic status and problem alcohol use: the positive relationship between income and the DSM-IV alcohol abuse diagnosis in 2008 revealed that among the alcohol abuse criteria, hazardous use is the most prevalent and the only criterion to have a significant positive relationship with income ($F = 20.3$, $df = 3$, $P < 0.0001$). Among the hazardous use symptoms, driving after drinking ($F = 13.0$, $df = 3$, $P < 0.0001$) and driving while drinking ($F = 9.2$, $df = 3$, $P < 0.0001$) were related positively to income. (61)

. With regards to alcohol consumption variables, frequency of drinking was found to be associated. Drinkers drank more often would have more chances to have health problems. This was consistent with a study by Kenneth, et.al on roles of drinking pattern and type of alcohol consumed in coronary heart disease in men in 2003 showed that as compared with men who consumed alcohol less than once per week, men who consumed alcohol three to four or five to seven days per week had decreased risks of myocardial infarction (multivariate relative risk, 0.68 [95 percent

confidence interval, 0.55 to 0.84] and 0.63 [95 percent confidence interval, 0.54 to 0.74], respectively). Among men, consumption of alcohol at least three to four days per week was inversely associated with the risk of myocardial infarction. (62) In 2004 a study by Elizabeth., et.al of alcohol intake, drinking patterns, and risk of prostate cancer in a large prospective cohort study revealed that men who drank alcohol on 5–6 days per week had a modestly higher risk of prostate cancer (HR = 1.19, 95 percent CI: 1.04, 1.35) than men who did not drink or who drank on less than 1 day per week. Men who consumed higher amounts (≥ 105 g/week) on 3–4 or 5–6 days of the week also had a suggestively higher risk of prostate cancer when compared with nondrinkers. (63) Types of drinking were found to be association with health consequences. Drinkers drank spirit more than other alcoholic beverages. This was similar with a study by Mehlig, et.al on alcoholic beverage and incidence with dementia in 2007 revealed that consumption of spirit was associated with risk of dementia (HR=1.5, 95% CI = 1.0,2.2) (64)

In this study showed that AUDIT scores was found to be positively correlated with health consequences scores. Increasing amount of alcohol drinking was related with increasing health problems. The results of qualitative analysis revealed that drinkers in higher levels of AUDIT had more problems or symptoms compared to drinkers in lower levels. Drinkers' health was depends on amount alcohol drinking. This was consistent with a study by Mattiko in 2007 revealed that higher levels of drinking were associated with higher rates of alcohol problems, but problem rates were notably higher for heavy drinkers. Heavy drinkers also had the highest risk for alcohol problems on the AUDIT (56). The finding was similar with a study by Femme.et.al on moderate alcohol consumption is associated with lower risk for incident diabetes and mortality in 2002 revealed that higher alcohol intakes were associated with increasing risks for mortality and diabetes. (65) In 2009 a study by Hutaphet. Et.al also showed that alcohol consumption was associated with workplace violence. High alcohol intake stimulated a worker to commit violence. (33) A study by Vira in 2005 also revealed that alcohol drinking was associated with accidents. Riders, who have high alcohol intake, were likely to lose control and would have accidents after that. Drinking riders were more likely to be hospitalized. (36)

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The study of alcohol consumption and health consequences among villagers in Thum Tong sub-district, Muang Nan district, Nan province, Thailand, aimed to identify and characterize the situation of alcohol consumption among villagers and the related health consequences.

The results of this study show that Thum Tong sub-district is an agricultural society. People live with their family. The majority of careers are farmers and unskilled employees. The average income is about 4,500 baht. Most drinkers in the village are male, and are between 45 and 59 years of age. Most male drinkers drink white spirits while female drinkers prefer beer. That is related to their income. White spirits are cheaper than whisky or beer and are easily available in villages. The majority of males and females are hazardous drinkers when they drink more than the standard number of drinks per occasion. Hazardous drinkers could become harmful drinkers and alcohol dependent. This is very important and drinkers should be concerned about their health problems. As the results of this study showed in the association between AUDIT scores and health consequences, drinkers would be affected by alcohol drinking.

Serving alcoholic beverages is a social event. Drinking alcohol was found to be acceptable in all villages where people always serve alcohol during special festivals and occasions. This was supported by the perception of respondents that most people in all villages always drink during special festivals. This was related to attitudes towards alcohol consumption that people think drinking is for social purposes. The drinking rate was higher at festivals or special occasions compared to drinking at home. Peers were influenced by drinking alcohol. People drink to build relationships among friends, families and relatives. People drink for fun and to welcome guests. This shows the relationship between villagers and also illustrates rural Thai culture. When it came to social effects, the study shows that drinkers have

trouble with their friends, family and society. Social effects are very important, as well. Health consequences include not only individual health problems but also the greater affect on society as a whole.

Regarding attitudes toward drinking alcohol, some respondents have a negative attitude towards alcohol consumption. People think that drinking alcohol is not good for them. They know that this can cause health problems and social problems such as trouble with friends, family and society. On the other hand, the majority of people have a positive attitude. This shows that drinking alcohol is found to be acceptable in villages. Attitudes towards drinking alcohol are associated with drinking behavior. People who have a positive attitude toward alcohol consumption might consume alcohol at some point in the future. (49) If drinking behavior is acceptable in villagers, people, especially young people, will drink more. Therefore, they might be affected by health consequences.

This study aimed to determine the association between socio-demographic factors and alcohol drinking patterns with health consequences. Sex, educational attainment, occupation and income, frequency of drinking and types of drinking were found to be associated with the intensity of health consequences. Males drank more than females. Due to the agricultural society found in this part of Thailand, drinkers were farmers and unskilled employees. They had low education and even lower incomes. Drinkers drank more after they had finished their daily work on their farms or in the rice fields. Drinking alcohol helps to build good relationships among people after a long day at work. This was consistent with their positive attitudes towards drinking alcohol. Regarding alcohol consumption variables, the types of drinking as well as the frequency of drinking were found to be associated. Moreover, AUDIT scores were found to be positively correlated with health consequence scores. Increasing the amount of alcohol consumed was associated with an increase of health consequences. Therefore, drinkers would have more alcohol-related health problems if they drink more. The qualitative study also revealed that drinkers had more symptoms or effects by alcohol consumption levels. The serious health problems were related with levels of alcohol drinking

6.2 Recommendations

Based on this study, drinking alcohol is a social event and is done for social purposes. This was consistent with perceptions and attitudes towards drinking alcohol. Almost all drinkers were considered hazardous drinkers, harmful drinkers and alcohol dependent. Alcohol drinkers were predominantly hazardous drinkers. Socio-demographic factors and alcohol consumption drinking patterns were found to be associated with health consequences. Since drinking alcohol causes health problems, recommendations for initiatives aimed at reducing alcohol consumption and further research should be as follows.

- 1) Integrated programs to reduce alcohol consumption need to be considered an urgent agenda for this community. According to the results of the study, drinking alcohol was not only an individual problems but also caused problems with society. Collaboration among drinkers, their families, community leaders, school teachers, monks and health workers is essential. Family members, such as children, wives and parents, can support male drinkers in changing their drinking behavior. Family institutes can protect children from alcohol by teaching them how to socialize without the use of alcohol. This will reduce the number of new young drinkers. Also, community action addressing alcohol-related harm can result in the reduction of alcohol consumption. Such action can be sustained only if it is initiated by and for the benefit of the community. In this context, public health workers play an important role in providing correct knowledge about health and social consequences of drinking alcohol to villagers, especially to drinkers.
- 2) The establishment of local public policy on reducing alcohol consumption is a powerful strategy to solve and prevent alcohol-related harm. Actually, this village has initiated and implemented a policy against the consumption of alcohol at funerals and during community sports. The study found that villagers had positive attitudes towards this policy and they did not drink during these community activities. With regard to this, new anti-alcohol

public policies are required in order to cover other community activities, such as religious ceremonies, wedding ceremonies, and so on.

- 3) Health services must be planned effectively and provided in a way to reduce morbidity and mortality among drinkers, as well as to minimize the number of new drinkers. According to the results from AUDIT, most respondents drink alcohol harmfully. Specific treatment and medication, as well as referral services, need to be prepared to alleviate the severity of alcohol-related illness in the community. In addition,
- 4) Further research on factors influencing alcohol consumption by people in this community can contribute to effective changes in behavior related to drinking alcohol. By understanding the significant causes of this behavior, consumption reduction policies, interventions and programs can be developed effectively.



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APPENDICES

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

APPENDIX A: SCHEDULE OF ACTIVITIES

Research durations: August 2010 - May 2011										
Research activities	Time frame (month)									
	AUG	SEP	OCT	NOV	DEC	IAN	FEB	MAR	APR	MAY
* Research question formulation and literature review	■	■	■							
* Proposal writing			■	■						
* Ethical approval						■	■	■		
* Field work: ask for corporation and recruit samples, Pre-test						■	■			
* Field work: data collection							■	■		
* Data analysis								■	■	
* Report writing and presentation									■	■

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APPENDIX B: ESTIMATED BUDGET

Items	Requested
1. Photocopy and print the questionnaire	2,000
2. Stationery	2,000
3. Full paper	1,000
4. Fee for research assistants (5 person x 2000THB)	10,000
5. Travel expenses for data collection	6,000
6. Seminar with research assistants for data collection and conclusion	2,980
7. Gift for respondents 334 person * 30 baht	10,020
8. Encoding the questionnaires	3,000
9. Computer analysis	3,000
Total budget	40,000

No.
House No.
Moo

APPENDIX C: QUESTIONNAIRES (ENGLISH VERSION)

Alcohol Consumption and Health Consequences among Villagers in Thum Tong Sub-District, Muang Nan District, Nan Province, Thailand.

The study of Alcohol Consumption and Health Consequences among Villagers in Thum Tong Sub-District, Muang Nan District, Nan Province, Thailand aims to collect the data on alcohol consumption, behaviors, and consequences in order to develop the public health since the villagers in Thum Tong tend to drink alcohol which can result in many health problems.

Accordingly, your cooperation to fill out this questionnaire is required to make this study complete and reliable. The information obtained will be useful to the study and can be further used as the basic health-related information of Thum Tong Sub-district.

Mr.Thatawat Rattanawitton

Questionnaire about alcohol consumption of the family members (the interviews will be conducted with the family members who currently live in this house; the members - whose names are shown in the house registration and who do not actually live in the house - are excluded.)

No.	Name	Family Status	Age (yrs.)	Sex	Marital Status	The alcohol consumption profile in the past year		
						Never drink	Drink	Used to drink

P.S. “Drink” means that during the past year, there was at least one time that the person drank either a can of beer, 2 big bottle caps of red whiskey, 4 jiggers of fermented whiskey, local whiskey, or Sato (rice wine) within a month. “Used to drink” means that the person used to drink alcohol but has stopped drinking for a year.

Description: This questionnaire is used to interview the family members whose ages are between 18 – 64 years; in one family, only one person will be interviewed. The questions are about personal information, the attitudes towards drinking alcohol, alcohol consumption profile and AUDIT, as well as the effects of drinking alcohol. Please mark ✓ and fill in the blanks where information is needed.

Part 1 Personal Information

1. Sex 1. Male 2. Female
2. Age years
3. Marital Status 1. Single (never get married) 2. Married
 3. Widowed 4. Divorced 5. Others ...
4. Education 1. Primary School 2. Middle School
 3. High School 4. Diploma
 5. Bachelor's Degree 6. > Bachelor's Degree
 7. Others (please specify)
5. Occupation
6. Average Salary Baht
7. According to your occupation, have you ever had or got involved in any alcoholic drinks with your co-workers? (please specify)
.....
8. In the past year, what was the drinking habits of people in your village?
 - 8.1 Most people often drink at home or with the family members.
 - 8.2 Most people drink on special occasions in the village such as weddings and the house warming ceremony.
 - 8.3 Most people drink during the festivals such as Songkran festival, New Year's Day, and Buddhist Lent Day.
 - 8.4 Most people seldom drink.

P.S. To drink “often” is to drink consecutively, for instance, every day, every 2 days, every week, or every month.

To drink “seldom” is considered from the frequency of drinking - about once a month or more.

Part 2 The questionnaire about the attitudes towards drinking alcohol

No.	Statements	Agree	N/A	Dis-agree
1	Drinking alcohol is good for health.			
2	Drinking alcohol cannot release your stress or make you feel fresh.			
3	Drinking wine or beer is safer than drinking whiskey.			
4	If you know how to drink alcohol, you will not get drunk.			
5	Drinking alcohol cannot keep you warm.			
6	Drinking alcohol cannot help sexual desires.			
7	Drinking a small amount of alcohol is fine; drink responsibly, drink consciously.			
8	Drinking alcohol is for self learning and social purpose.			
9	Drinking alcohol is an individual right not others' business.			
10	Drinking alcohol can cause family relationship problem.			
11	A country cannot be rich by sin taxes.			
12	Children should not drink alcohol even just a small amount.			
13	Drinking alcohol in a temple or a funeral in Thum Tong Sub-district is allowed since there are no rules applied.			
14	Drinking alcohol should be continued since it helps welcome the funeral attendees.			
15	Alcohol prohibition on Thum Tong Sub-district's Sports Day does not ruin the colors of the sport competitions; it helps decrease the risk of having fights and accidents.			

**Part 3 Questions concerning alcohol consumption profile and how to use AUDIT
(Alcohol Use Disorders Identification Test)**

• **Alcohol consumption profile (all kinds of alcoholic drinks)**

1. In your life, have you ever had any alcoholic drinks?
 - 1.1 Never (skip to no.3 – end of the interview)
 - 1.2 Yes, and I still drink them at present. (skip to no.4)
 - 1.3 I used to but it has been over a year since I quit drinking. (skip to no.3 – end of the interview)

2. In the past year, have you ever had any alcoholic drinks? (a few sips is not considered)
 - 2.1 No (the end of the interview)
 - 2.2 Yes (skip to no.4)
 - Type of drinks 2.2.1 Whiskey (please specify)
 - 2.2.2 Beer 2.2.3 Wine 2.4 Others
 - An amount of drink (please specify)
 - Drinking frequency (please specify)time(s)a year/ a month/ a day

3. In the past year, have other members in your family had any alcoholic drinks?
 - 3.1 No 3.2 Yes
 - 3.3 No idea
 - If yes, who has had?
 - For the one who has consumed the most alcohol, what types of drinks did you have last time? (you may tick more than one)
 - Whiskey (please specify)
 - Beer Wine Others
 - With whom?
 - Where?
 - The number of people who drank people
 - A total amount of drink
 - One person's amount of drink.....

What are the symptoms and the effects after drinking? Please explain (for example, did you have any dizziness after drinking? How much dizziness did you have? What is your dizziness like? Did you have a hangover? What was it like? Did you cause any trouble to the other members in your family? Did you have any quarrels with your family or friends who drank together? Were there any accidents?)

.....

.....

.....

.....

4. In the past year, have any of your neighbors whose houses are close to yours – 2 adjacent houses in all directions - had any alcoholic drinks?

4.1 No 4.2 Yes (please explain the situation)

4.3 No idea

Please explain your latest drinking situation and the effects of your neighbors' drinking (for example, do you feel bothered or have any quarrels or problems?)

.....

.....

.....

.....

5. In the past year, have you ever had the following drinks at one time?

5.1 More than 6 cans or 3 bottles (large) of beer

5.1.1 No 5.1.2 Yes how many times?

5.2 More than 5 glasses of whiskey or half a bottle (or 185 ml.) of

whiskey

5.2.1 No 5.2.2 Yes how many times?

6. In the past year, have you ever had alcoholic drinks with your friends? (either at your house or your workplace)

6.1 No

6.2 Yes (according to the last time you drank) when did you drink?

.....

Type of drinks 6.2.1 Whiskey (please specify)
 6.2.2 Beer 6.2.3 Wine 6.2.4 Others.....

The number of people who had the same type of drinks as you people

A total amount of drink One person's amount of drink

Please explain your drinking situation and its effects (for example, why did you drink? Who invited you? Did you drink to have fun or to relieve stress? How much did you enjoy drinking? Did you feel dizzy after drinking? If yes, how much did you have it? What was it like? After drinking, did you have a hangover? What was it like? Did you later have any problems with your family such as quarrels with family members or the friends who drank with you? Were there any accidents?)

.....

7. In the past year, have you ever had alcoholic drinks with the members in your family?

7.1 No

7.2 Yes (according to the last time you drank) when did you drink?

Type of drinks 7.2.1 Whiskey (please specify)
 7.2.2 Beer 7.2.3 Wine 7.2.4 Others

The number of people who had the same type of drinks as you people

A total amount of drink One person's amount of drink

Please explain your drinking situation and its effects (for example, why did you drink? Who invited you? Did you drink to have fun or to relieve stress? How much did you enjoy drinking? Did you feel dizzy after drinking? If yes, how much did you have it? What was it like? After drinking, did you have a hangover? What was it like? Did you later have any problems with your family such as quarrels with family members or the friends who drank with you? Were there any accidents?)

.....
.....
.....
.....

8. In the past year, have you ever had alcoholic drinks in the following festivals?

8.1 Songkran Festival (the year of 2010)

8.1.1 No

8.1.2 Yes (according to the day you drank the most alcohol)

Type of drinks 8.1.2.1 Whiskey (please specify)

8.1.2.2 Beer 8.1.2.3 Wine 8.1.2.4 Others

When? (please specify) With whom? (please specify)

Where? (please specify)

The number of people who had the same type of drinks as you people

A total amount of drink One person's amount of drink

Please explain your drinking situation (for example, why did you drink? Who invited you? Did you drink to have fun or to relieve stress? How much did you enjoy drinking? Did you feel dizzy after drinking? If yes, how much did you have it? What was it like?)

.....
.....
.....
.....

What were your symptoms after drinking? (for example, did you have a hangover? What was it like?)

.....
.....
.....
.....

What were your family members' attitudes towards you? (for example, they blamed you or wished that you would drink less. They wanted you to stop drinking so

you would not cause any trouble to the family. Or, they get embarrassed when being looked at by neighbors.)

.....
.....
.....
.....

Did you spend money this time? No Yes (please give more information)
Traveling Baht Alcoholic drinks Baht
Food Baht Others Baht
Total expense Baht

8.2 New Year's Day (the year of 2011)

8.2.1 No
 8.2.2 Yes (according to the day you drank the most alcohol)

Type of drinks 8.2.2.1 Whiskey (please specify)
 8.2.2.2 Beer 8.2.2.3 Wine 8.2.2.4 Others

When? (please specify) With whom? (please specify)
Where? (please specify)

The number of people who had the same type of drinks as you people
A total amount of drink One person's amount of drink

Please explain your drinking situation (for example, why did you drink? Who invited you? Did you drink to have fun or to relieve stress? How much did you enjoy drinking? Did you feel dizzy after drinking? If yes, how much did you have it? What was it like?)

.....
.....
.....
.....

What were your symptoms after drinking? (for example, did you have a hangover? What was it like?)

.....
.....

.....

 What were your family members' attitudes towards you? (for example, they blamed you or wished that you would drink less. They wanted you to stop drinking so you would not cause any trouble to the family. Or they get embarrassed when being looked at by neighbors.)

Did you spend money this time? No Yes (please give more information)

Traveling Baht Alcoholic drinks Baht
 Food Baht Others Baht
 Total expense Baht

8.3 A Funeral

8.3.1 No

8.3.2 Yes (according to the last time you drank at a funeral)

Type of drinks 8.3.2.1 Whiskey (please specify)

8.3.2.2 Beer 8.3.2.3 Wine 8.3.2.4 Others

With whom? (please specify) Where? (please specify)

The number of people who had the same type of drinks as you people

A total amount of drink One person's amount of drink

Please explain your drinking situation (for example, why did you drink? Who invited you? Did you drink to have fun or to relieve stress? How much did you enjoy drinking? Did you feel dizzy after drinking? If yes, how much did you have it? What was it like?)

What were your symptoms after drinking (for example, did you have a hangover? What was it like?)

.....

At the funeral, what were people’s attitudes towards you? How did the village committee deal with you? (for example, they blamed you and told you not to drink. They allowed you to drink. Did the village committee come to check? Were you fined for drinking alcohol? or, they did nothing to you.)

.....

Did you spend money this time? No Yes (please give more information)

Traveling Baht Alcoholic drinks Baht
 Food Baht Others Baht
 Total expense Baht

8.4 Annual Sports Day of Thum Tong Sub-district

- 8.4.1 No
- 8.4.2 Yes (according to the day you drank the most alcohol)

Type of drinks 8.4.2.1 Whiskey (please specify)
 8.4.2.2 Beer 8.4.2.3 Wine 8.4.2.4 Others

When? (please specify) With whom? (please specify)
 Where? (please specify)

The number of people who had the same type of drinks as you people
 A total amount of drink One person’s amount of drink

Please explain your drinking situation (for example, why did you drink? Who invited you? Did you drink to have fun or to relieve stress? How much did you enjoy drinking? Did you feel dizzy after drinking? If yes, how much did you have it? What was it like?)

.....

What were your symptoms after drinking? (for example, did you have a hangover? What was it like?)

.....

On the sports day, what were people’s attitudes towards you? How did the village committee think and deal with you? (for example, they blamed you and did not allow you to drink. You were allowed to drink. Everyone drank so that there could be equality. Did the village committee warn you? Were you fined for drinking alcohol?)

.....

Did you spend money this time? No Yes (please give more information)

Traveling Baht Alcoholic drinks Baht
 Food Baht OthersBaht

Total expense Baht

9. In the past year, if you have had alcoholic drinks regularly, how much money did you spend on alcohol monthly? Baht (“regularly” means that you have been drinking steadily, for instance, every day, every two or three days, every week, or at the end of every month)

8.1 Not regularly 8.2 drink without spending money

10. In the past month, have you had any alcoholic drinks? (a few sips is not considered)

9.1 No 9.2 Yes

11. In the past week, have you had any alcoholic drinks? (a few sips is not considered)

10.1 No

10.2 Yes

12. The first time you drank alcohol Years old The total length of time.....

13. Do you plan to quit drinking alcohol?

13.1 No

13.2 Yes when? (in how many years?)

The reason to quit drinking



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

AUDIT BY WHO

<p>1. How often do you have a drink containing alcohol?</p> <p>(0) Never [Skip to Qs 9-10] (1) Monthly or less (2) 2 to 4 times a month <input type="checkbox"/> (3) 2 to 3 times a week (4) 4 or more times a week</p>	<p>4. How often during the last year have you found that you were not able to stop drinking once you had started?</p> <p>(0) Never (1) Less than monthly (2) Monthly <input type="checkbox"/> (3) Weekly (4) Daily or almost daily</p>
<p>2. How many drinks containing alcohol do you have on a typical day when you are drinking?</p> <p>(0) 1 or 2 (1) 3 or 4 (2) 5 or 6 (3) 7, 8, or 9 <input type="checkbox"/> (4) 10 or more</p>	<p>5. How often during the last year have you failed to do what was normally expected from you because of drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly <input type="checkbox"/> (4) Daily or almost daily</p>
<p>3. How often do you have six or more drinks on one occasion?</p> <p>(0) Never (1) Less than monthly (2) Monthly <input type="checkbox"/> (3) Weekly (4) Daily or almost daily</p> <p><i>Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0</i></p>	<p>6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?</p> <p>(0) Never (1) Less than monthly (2) Monthly <input type="checkbox"/> (3) Weekly (4) Daily or almost daily</p>
<p>7. How often during the last year have you had a feeling of guilt or remorse after drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly <input type="checkbox"/> (3) Weekly (4) Daily or almost daily</p>	<p>9. Have you or someone else been injured as a result of your drinking?</p> <p>(0) No (2) Yes, but not in the last year (4) Yes, during the last year <input type="checkbox"/></p>
<p>8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly <input type="checkbox"/> (3) Weekly (4) Daily or almost daily</p>	<p>10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?</p> <p>(0) No (2) Yes, but not in the last year <input type="checkbox"/> (4) Yes, during the last year</p>

Part 5 In the past 12 months, did you do the following things or encounter the following situations?

Questions	Never	Ever	N/A
1. Has drinking alcohol caused trouble with you and your spouse?			
2. Has drinking alcohol caused trouble with your family relationship and your children?			
3. Have you and your spouse ever broken up because of drinking alcohol?			
4. Has drinking alcohol caused trouble with friends or in society?			
5. Have you ever quarreled while you were drinking?			
6. Have you ever had trouble with the law that involved alcohol drinking?			
7. Have you ever had trouble with law after drinking?			
8. Have you ever had an accident while driving or riding?			
9. Has drinking alcohol caused trouble with your work, study or chance to get a job?			
10. Has drinking alcohol caused trouble with your housework?			
11. Has drinking alcohol caused trouble with finances?			
12. Have you ever had health problems that involving alcohol drinking?			
13. Have you ever felt sad or guilty after alcohol drinking?			
14. Have you ever felt unsatisfied when someone commented about alcohol drinking?			
15. Have you ever lost or nearly lost your job after alcohol drinking?			

เลขที่.....
บ้านเลขที่.....
หมู่ที่.....

Questionnaires (Thai version)

การดื่มเครื่องดื่มแอลกอฮอล์และผลกระทบต่อด้านสุขภาพของประชาชนตำบลถ้ำทอง

อำเภอเมืองน่าน จังหวัดน่าน ประเทศไทย

การศึกษาในครั้งนี้เป็นการศึกษาเรื่อง “การดื่มเครื่องดื่มแอลกอฮอล์และผลกระทบต่อด้านสุขภาพของประชาชนตำบลถ้ำทอง จังหวัดน่าน ประเทศไทย” เนื่องจากประชาชนตำบลถ้ำทองยังมีปัญหาในเรื่องการดื่มเครื่องดื่มแอลกอฮอล์ อีกทั้งปัญหาดังกล่าวอาจมีผลกระทบต่อด้านสุขภาพอีกด้วย โดยความคาดหวังในการศึกษานี้เพื่อสามารถนำข้อมูลที่ได้เป็นข้อมูลพื้นฐานในเรื่องพฤติกรรมกรรมการดื่มเครื่องดื่มแอลกอฮอล์และผลกระทบต่อด้านสุขภาพของประชาชนตำบลถ้ำทอง ซึ่งจะสามารถใช้เป็นประโยชน์ในการพัฒนางานด้านสาธารณสุขอย่างแท้จริง

ดังนั้นจึงขอความร่วมมือท่านในการตอบแบบสัมภาษณ์นี้เพื่อให้การศึกษานี้มีความสมบูรณ์และน่าเชื่อถือ โดยข้อมูลที่ได้จากคำตอบของท่านจะเป็นประโยชน์เพื่อการศึกษาครั้งนี้และสามารถนำไปใช้เป็นข้อมูลพื้นฐานด้านสุขภาพของตำบลถ้ำทองต่อไป

นายชนะวรรณ รัตนวิฑูรย์

แบบสอบถามเกี่ยวกับสมาชิกในครัวเรือนกับการบริโภคเครื่องดื่มแอลกอฮอล์ (สัมภาษณ์เฉพาะสมาชิกทุกคนที่อาศัยอยู่บ้านหลังนี้จริง ไม่นับรวมคนที่มิชื่อในทะเบียนบ้านแต่ไม่ได้อาศัยอยู่ในบ้าน)

ลำดับ	ชื่อ - สกุล	สถานภาพครอบครัว	อายุ (ปี)	เพศ	สถานภาพสมรส	ประวัติการดื่มสุรา 1 ปีที่ผ่านมา นับจากวันที่สัมภาษณ์		
						ไม่ดื่ม	ดื่ม	เคยดื่มแต่หยุดดื่ม

หมายเหตุ “ดื่ม” หมายถึง ในรอบหนึ่งปีมีอย่างน้อยหนึ่งครั้งที่ดื่ม 1 มาตรฐานคือ เบียร์ 1 กระป๋อง, เหล้าแดง 2 ฝาใหญ่ หรือ สุราแช่ สุราพื้นเมือง สาโท 4 ตอง ในหนึ่งเดือน, เคยดื่มแต่หยุด หมายถึง เคยดื่มแต่หยุดดื่มติดต่อกันมาแล้ว 1 ปี

คำอธิบาย แบบสัมภาษณ์นี้ใช้สัมภาษณ์สมาชิกในครัวเรือน ที่มีอายุ 18 – 64 ปี ซึ่งเป็นตัวแทนครัวเรือนละ 1 คน คำถามเกี่ยวกับข้อมูลส่วนบุคคล, ทักษะคิดในการดื่มน้ำดื่มแอลกอฮอล์, ประวัติการดื่มและ AUDIT และ ผลกระทบจากดื่มน้ำดื่มแอลกอฮอล์ โดยการขีดเครื่องหมาย / หรือเติมข้อความ ลงในช่องที่ตรงกับกรให้ข้อมูล

ส่วนที่ 1 ข้อมูลส่วนบุคคล

9. เพศ 1. ชาย 2. หญิง
10. อายุ ปี
11. สถานภาพสมรส 1. โสด (ไม่เคยแต่งงาน) 2. สมรส
 3. หม้าย 4. หย่า 5. อื่น ๆ.....
12. ระดับการศึกษา 1. ประถมศึกษา 2. มัธยมศึกษาตอนต้น
 3. มัธยมศึกษาตอนปลาย หรือ ปวช. 4. อนุปริญญา/ ปวส.
 5. ปริญญาตรี 6. สูงกว่าปริญญาตรี
 7. อื่น ๆ ระบุ.....
13. อาชีพของท่านระบุ
14. รายได้เฉลี่ยต่อเดือนของท่าน บาท
15. จากการประกอบอาชีพของท่าน ท่านได้เคยดื่มน้ำดื่มแอลกอฮอล์หรือเกี่ยวข้องกับเครื่องดื่มแอลกอฮอล์กับเพื่อนร่วมงานหรือไม่ ระบุ
16. ในระยะ 1 ปีที่ผ่านมา คนในหมู่บ้านของท่านดื่มน้ำดื่มแอลกอฮอล์อย่างไร
 8.1 คนส่วนใหญ่ดื่มน้ำดื่มเป็นประจำที่บ้านหรือในครอบครัว
 8.2 คนส่วนใหญ่ดื่มน้ำดื่มเมื่อมีงานเลี้ยงสังสรรค์ในหมู่บ้าน เช่น แต่งงาน ขึ้นบ้านใหม่
 8.3 ส่วนใหญ่ดื่มน้ำดื่มเมื่อมีงานตามเทศกาล เช่น วันสงกรานต์ ขึ้นปีใหม่ เข้าพรรษา
 8.4 คนส่วนใหญ่ดื่มนาน ๆ ครั้ง

หมายเหตุ ดื่มน้ำดื่มเป็นประจำคือ ดื่มน้ำดื่มในช่วงเวลาที่ซ้ำ ๆ หรือใกล้เคียงกัน เช่น ทุกวัน, ทุกสองวัน, ทุกสัปดาห์ หรือทุกเดือน ดื่มนาน ๆ ครั้งคือ ระยะเวลาความถี่ในการดื่มน้ำดื่มเดือนละหนึ่งครั้งหรือมากกว่า

ส่วนที่ 2 แบบสอบถามทัศนคติเกี่ยวกับเครื่องดื่มแอลกอฮอล์

ลำดับ	ข้อความ	เห็นด้วย	ไม่ แน่ใจ	ไม่เห็น ด้วย
1	การดื่มน้ำดื่มแอลกอฮอล์มีประโยชน์ต่อสุขภาพ			
2	การดื่มน้ำดื่มแอลกอฮอล์ไม่สามารถทำให้ร่างกายสดชื่นหรือคลายเครียด			
3	การดื่มน้ำไวน์ เบียร์ ปลอดภัยกว่าการดื่มน้ำดื่ม			

ลำดับ	ข้อความ	เห็นด้วย	ไม่ แน่ใจ	ไม่เห็น ด้วย
4	เครื่องดื่มแอลกอฮอล์ ดื่มให้เป็นกิจไม่เมา			
5	ดื่มเครื่องดื่มแอลกอฮอล์ไม่สามารถกำหนดได้			
6	ดื่มเครื่องดื่มแอลกอฮอล์ไม่สามารถบารุงกำลังทางเพศ			
7	ดื่มเครื่องดื่มแอลกอฮอล์แต่น้อยไม่เป็นพิษเป็นภัย ดื่มอย่างรับผิดชอบ ดื่มอย่างมีสติ			
8	ดื่มเครื่องดื่มแอลกอฮอล์เพื่อเรียนรู้ เพื่อพัฒนาตัวเอง			
9	การดื่มเครื่องดื่มแอลกอฮอล์เป็นเรื่องสิทธิส่วนบุคคล คนอื่นไม่มีสิทธิ์มา เกี่ยว			
10	การดื่มเครื่องดื่มแอลกอฮอล์ทำให้เกิดปัญหาด้านความสัมพันธ์ในครอบครัว			
11	เครื่องดื่มแอลกอฮอล์ไม่ได้ทำประเทศชาติร่ำรวยขึ้น จากการเก็บภาษีมากขึ้น			
12	บุตร หลาน ไม่ควรทดลองหรือดื่มเครื่องดื่มแอลกอฮอล์ไม่ว่าในปริมาณมาก หรือปริมาณน้อย			
13	การดื่มเครื่องดื่มแอลกอฮอล์ในวัดหรืองานศพในตำบลถึงตอง สามารถทำ ได้เพราะ ไม่มีกฎหมายห้าม			
14	การดื่มเครื่องดื่มแอลกอฮอล์ในงานศพในตำบลถึงตอง ควรมีการปฏิบัติอย่าง ต่อเนื่องเพราะเป็นการต้อนรับแขกที่มาร่วมงาน			
15	การห้ามดื่มเครื่องดื่มแอลกอฮอล์ในงานแข่งขันกีฬาประจำตำบลถึงตอง ไม่ได้ทำให้การแข่งขันกีฬาขาดความสนุกสนาน สามารถลดการทะเลาะ วิวาทและเกิดอุบัติเหตุได้			

ส่วนที่ 3 คำถามเกี่ยวกับประวัติการดื่มเครื่องดื่มแอลกอฮอล์และการใช้แบบประเมิน AUDIT (Alcohol Use Disorders Identification Test)

- ประวัติการดื่มเครื่องดื่มแอลกอฮอล์ทุกชนิด

9. ในชีวิตของท่าน ท่านเคยดื่มเครื่องดื่มแอลกอฮอล์หรือไม่

1.1 ไม่เคยดื่ม (ข้ามไปข้อ 3 แล้วยุติการสัมภาษณ์)

1.2 เคยดื่มและปัจจุบันยังดื่ม (ข้ามไปตอบข้อ 4)

1.3 เคยดื่มแต่ปัจจุบันหยุดดื่มมากกว่าหนึ่งปี (ข้ามไปตอบข้อ 3 แล้วยุติการ
สัมภาษณ์)

10. หนึ่งปีที่ผ่านมาคุณดื่มเครื่องดื่มแอลกอฮอล์หรือไม่ (ไม่นับการจิบหรือชิมเพียง 1-2 จิบเล็ก ๆ)

2.1 ไม่ดื่ม (ยุติการสัมภาษณ์)

2.2 ดื่ม (ข้ามไปตอบข้อ 4)

ประเภทเครื่องดื่ม 2.2.1 เหล้า ระบุ.....

2 เบียร์ 2.2.3 ไวน์ 2.4 อื่น ๆ.....

ปริมาณการดื่ม ระบุ.....

ดื่มบ่อยแค่ไหน ระบุ.....ครั้งต่อปี หรือ ต่อเดือน หรือ ต่อวัน

11. ในหนึ่งปีที่ผ่านมาสมาชิกคนอื่น ๆ ในบ้านท่านดื่มเครื่องดื่มแอลกอฮอล์หรือไม่

11.1 ไม่ดื่ม 3.2 ดื่ม

3.3 ไม่ทราบ

ถ้าดื่มใครเป็นผู้ดื่มบ้าง.....

เฉพาะคนที่ดื่มมากที่สุด ครั้งล่าสุดดื่มเครื่องดื่มประเภทใดบ้าง (ตอบได้มากกว่า 1 ข้อ)

เหล้า ระบุ.....

เบียร์ ไวน์ อื่น ๆ.....

ดื่มกับใคร

ดื่มที่ไหน

จำนวนคนที่ร่วมดื่มทั้งหมด

ปริมาณการดื่มทั้งหมด

ปริมาณการดื่มต่อคน

อาการจากการดื่มและผลจากการดื่มเป็นอย่างไร โปรดอธิบาย (เช่น มีอาการมึนเมาจากการดื่มหรือไม่ เมามาก เมาน้อย ขนาดไหน อาการมึนเมาเป็นอย่างไร, หลังดื่มแล้วมีอาการเมาค้างหรือไม่ อาการเป็นอย่างไร, ดื่มแล้วทำความรำคาญให้กับคนในครอบครัวหรือไม่ เกิดการทะเลาะวิวาทกับคนในครอบครัวหรือเพื่อนที่ดื่มด้วยกันหรือไม่ เกิดอุบัติเหตุหรือไม่)

.....

.....

.....

.....

12. ในหนึ่งปีที่ผ่านมาเพื่อนบ้านของท่านที่อาศัยอยู่ติดกับบ้านของท่านนับออกไป 2 หลัง ในทุกทิศทางมีการดื่มห้ำหรือไม

4.1 ไม่ดื่ม 4.2 ดื่มห้ำ (ถ้าดื่มห้ำโปรดเล่าสถานการณ์)

4.3 ไม่ทราบ

เล่าสถานการณ์การดื่มห้ำครั้งล่าสุดและผลจากการดื่มห้ำของคนข้างบ้าน เช่น ท่านรำคาญไหม หรือมี ปัญหาทะเลาะวิวาทและปัญหาอื่นๆ

.....

.....

.....

.....

13. ในหนึ่งปีที่ผ่านมาท่านเคยดื่มห้ำเครื่องดื่มห้ำแอลกอฮอล์ต่อไปนี้ติดต่อกันครั้งเดียวหรือไม่

13.1 เบียร์มากกว่า 6 กระป๋อง หรือ 3 ขวดใหญ่

5.1.1 ไม่เคย 5.1.2 เคย กี่ครั้ง.....

13.2 เหล้ามากกว่า 5 แก้วหรือครึ่งเบน

5.2.1 ไม่เคย 5.2.2 เคย กี่ครั้ง.....

14. ในหนึ่งปีที่ผ่านมาท่านดื่มห้ำเครื่องดื่มห้ำแอลกอฮอล์กับเพื่อน(ที่บ้านหรือที่ทำงาน) หรือไม่

14.1 ไม่ดื่ม

14.2 ดื่มห้ำ (โปรดตอบคำถามครั้งสุดท้ายที่ดื่มห้ำ) ดื่มห้ำเมื่อไหร่.....

ท่านดื่มห้ำเครื่องดื่มห้ำอะไร 6.2.1 เหล้า ระบุ.....

เบียร์ 6.2.3 ไวน์ 6.2.4 อื่น ๆ.....

จำนวนคนที่ร่วมดื่มห้ำเครื่องดื่มห้ำแอลกอฮอล์ประเภทเดียวกับท่านทั้งหมด คน

ปริมาณการดื่มห้ำทั้งหมด ปริมาณการดื่มห้ำต่อคน

เล่าสถานการณ์จากการดื่มห้ำและผลจากการดื่มห้ำ (เช่น ทำไมท่านถึงดื่มห้ำ, ใครเป็นคนชวนท่าน ดื่มห้ำ, ดื่มห้ำเพื่อความสนุกสนานหรือดื่มห้ำเพื่อแก้ความทุกข์, ขณะดื่มห้ำท่านมีความสุขสนุกสนานหรือไม่ เพียงไร, มีอาการเมามาจากการดื่มห้ำหรือไม่ เมามาก เมาน้อย ขนาดไหน อาการมาเป็นอย่างไร, หลังดื่มห้ำแล้วมีอาการเมาค้างหรือไม่ อาการเป็นอย่างไร, ดื่มห้ำแล้วทำให้มีปัญหากับคนในครอบครัวหรือไม่ อย่างไร เช่น เกิดการทะเลาะวิวาทกับคนในครอบครัวหรือเพื่อนที่ดื่มห้ำ เกิดอุบัติเหตุหรือไม่)

.....

.....

15. ในหนึ่งปีที่ผ่านมาท่านดื่มเครื่องดื่มแอลกอฮอล์กับคนในครอบครัวหรือไม่

15.1 ไม่ดื่ม

15.2 ดื่ม(โปรดตอบคำถามครั้งสุดท้ายที่ดื่ม) ดื่มเมื่อไหร่.....

ท่านดื่ม เครื่องดื่มอะไร 7.2.1 เหล้า ระบุ.....

7.2.2 เบียร์ 7.2.3 ไวน์ 7.2.4 อื่น ๆ.....

จำนวนคนที่ร่วมดื่มเครื่องดื่มแอลกอฮอล์ประเภทเดียวกับท่านทั้งหมด คน

ปริมาณการดื่มทั้งหมด ปริมาณการดื่มต่อคน

เล่าสถานการณ์จากการดื่มและผลจากการดื่ม (เช่น ทำไมท่านถึงดื่ม, ใครเป็นคนชวนท่านดื่ม, ดื่มเพื่อความสนุกสนานหรือดื่มเพื่อแก้ความทุกข์, ขณะดื่มท่านมีความสุขสนุกสนานหรือไม่เพียงไร, มีอาการมึนเมาจากการดื่มหรือไม่ เมามาก เมาน้อย ขนาดไหน อาการเมาเป็นอย่างไรมาก่อน, หลังดื่มแล้วมีอาการเมาค้างหรือไม่ อาการเป็นอย่างไรมาก่อน, ดื่มแล้วทำให้มีปัญหาเกี่ยวกับคนในครอบครัวหรือไม่ อย่างไร เช่น เกิดการทะเลาะวิวาทกับคนในครอบครัวหรือเพื่อนที่ดื่ม เกิดอุบัติเหตุหรือไม่)

16. ในหนึ่งปีที่ผ่านมา คุณดื่มเครื่องดื่มแอลกอฮอล์ในงานเทศกาลต่าง ๆ ต่อไปนี้หรือไม่

16.1 วันสงกรานต์ (ปี พ.ศ. 2553)

16.1.1 ไม่ดื่ม

16.1.2 ดื่ม (โปรดตอบคำถามวันที่ท่านดื่มปริมาณมากที่สุด)

ท่านดื่มเครื่องดื่มอะไร 8.1 เหล้า ระบุ.....

8.1.2 เบียร์ 8.1.2.3 ไวน์ 8.1.2.4 อื่น ๆ.....

ดื่มวันไหน ระบุ..... ดื่มกับใคร ระบุ.....

ดื่มที่ไหน ระบุ.....

จำนวนคนร่วมดื่มเครื่องดื่มแอลกอฮอล์ประเภทเดียวกับท่านทั้งหมด คน

ปริมาณการดื่มทั้งหมดเท่าไร ปริมาณการดื่มต่อคน

เล่าสถานการณ์จากการดื่ม (เช่น ทำไมท่านถึงดื่ม, ใครเป็นคนชวนท่านดื่ม, ดื่มเพื่อความสนุกสนานหรือดื่มเพื่อแก้ความทุกข์, ขณะดื่มท่านมีความสุขสนุกสนานหรือไม่เพียงไร, มีอาการมึนเมาจากการดื่มหรือไม่ เมามาก เมาน้อย ขนาดไหน อาการเมาเป็นอย่างไรมาก่อน)

.....

 หลังดื่มแล้วอาการเป็นอย่างไร (เช่น หลังดื่มแล้วมีอาการเมาค้างหรือไม่ อาการเป็นอย่างไร)

.....

 คนในครอบครัวมีความคิดเห็นต่อท่านอย่างไร (เช่น มีการตำหนิตาน อยากให้ท่านดื่ม
 น้อยลงหรือไม่ ไม่อยากให้ดื่มเพราะมีปัญหาทะเลาะกันในครอบครัว หรืออายุสังขมรอบข้างหรือ
 เพื่อนบ้าน)

.....

 ท่านเสียเงินในการดื่มครั้งนี้หรือไม่ เสีย (กรุณาตอบรายละเอียดเพิ่ม)
 ค่าเดินทาง ค่ารถ บาท ค่าเครื่องดื่มแอลกอฮอล์ บาท
 ค่ากับแกล้ม บาท อื่น ๆ.....บาท

รวมค่าใช้จ่าย บาท

16.2 วันขึ้นปีใหม่ (ปี พ.ศ. 2554)

16.2.1 ไม่ดื่ม

16.2.2 ดื่ม (โปรดตอบคำถามวันที่ท่านดื่มปริมาณมากที่สุด)

ท่านดื่มเครื่องดื่มอะไร 8 2.2.1 เหล้า ระบุ.....

8. 2.2.2 เบียร์ 8. 2.2.3 ไวน์ 8.2.2.4 อื่น ๆ.....

ดื่มวันไหน ระบุ..... ดื่มกับใคร ระบุ.....

ดื่มที่ไหน ระบุ.....

จำนวนคนร่วมดื่มเครื่องดื่มแอลกอฮอล์ประเภทเดียวกับท่านทั้งหมด คน

ปริมาณการดื่มทั้งหมดเท่าไร ปริมาณการดื่มต่อคน

เล่าสถานการณ์จากการดื่ม (เช่น ทำไมท่านถึงดื่ม, ใครเป็นคนชวนท่านดื่ม, ดื่มเพื่อความ
 สนุกสนานหรือดื่มเพื่อแก้ความทุกข์, ขณะดื่มท่านมีความสุขสนุกสนานหรือไม่เพียงไร, มีอาการ
 มึนเมาจากการดื่มหรือไม่ เมามาก เมาน้อย ขนาดไหน อาการเมาเป็นอย่างไร)

.....

หลังดื่มแล้วอาการเป็นอย่างไร (เช่น หลังดื่มแล้วมีอาการเมาค้างหรือไม่ อาการเป็นอย่างไร)

.....

คนในครอบครัวมีความคิดเห็นต่อท่านอย่างไร (เช่น มีการตำหนิตาน อยากให้ท่านดื่มน้อยลงหรือไม่ ไม่อยากให้คุณดื่มเพราะมีปัญหาทะเลาะกันในครอบครัว หรืออายุสังขมรอบข้างหรือเพื่อนบ้าน)

.....

ท่านเสียเงินในการดื่มครั้งนี้หรือไม่ ไม่ เสีย (กรุณาตอบรายละเอียดเพิ่ม)
 ค่าเดินทาง ค่ารถ บาท ค่าเครื่องดื่มแอลกอฮอล์ บาท
 ค่ากับแกล้ม บาท อื่น ๆ.....บาท
 รวมค่าใช้จ่าย บาท

16.3 งานศพ

16.3.1 ไม่ดื่ม

16.3.2 ดื่ม (โปรดตอบคำถามวันที่ท่านดื่มในครั้งสุดท้ายในงานศพ)

ท่านดื่มเครื่องดื่มอะไร 8 3.2.1 เหล้า ระบุ.....

8. 3.2.2 เบียร์ 8. 3.2.3 ไวน์ 8.3.2.4 อื่น ๆ.....

ดื่มกับใคร ระบุ..... ดื่มที่ไหน ระบุ.....

จำนวนคนร่วมดื่มเครื่องดื่มแอลกอฮอล์ประเภทเดียวกับท่านทั้งหมด คน

ปริมาณการดื่มทั้งหมดเท่าไร ปริมาณการดื่มต่อคน

เล่าสถานการณ์จากการดื่ม (เช่น ทำไมท่านถึงดื่ม, ใครเป็นคนชวนท่านดื่ม, ขณะดื่มท่านมีความสุขสนุกสนานหรือไม่เพียงไร, มีอาการมึนเมาจากการดื่มหรือไม่ เมามาก เมาน้อย ขนาดไหนมีอาการอย่างไร)

.....

 หลังดื่มแล้วอาการเป็นอย่างไร (เช่น หลังดื่มแล้วมีอาการเมาค้างหรือไม่ อาการเป็นอย่างไร)

.....

 คนในงานศพมีความคิดเห็นหรือคณะกรรมการหมู่บ้านดำเนินมาตรการกับท่านอย่างไร (เช่น มีการ
 ตำหนิต่าน ห้ามไม่ให้ดื่ม หรืออนุญาตให้ท่านดื่มได้ตามปกติ กรรมการหมู่บ้านได้มาเข้ามา
 ตรวจสอบหรือไม่ แล้วท่านโดนปรับจากการดื่มครั้งนี้หรือไม่ หรือไม่ได้ทำอะไรกับท่านเลย)

.....

 ท่านเสียเงินในการดื่มครั้งนี้หรือไม่ เสีย (กรุณาตอบรายละเอียดเพิ่ม)

ค่าเดินทาง ค่ารถ บาท ค่าเครื่องดื่มแอลกอฮอล์ บาท

ค่ากับแกล้ม บาท อื่น ๆ.....บาท

รวมค่าใช้จ่าย บาท

16.4 งานกีฬาประจำตำบลถัดมา

16.4.1 ไม่ดื่ม

16.4.2 ดื่ม (โปรดตอบคำถามวันที่ท่านดื่มปริมาณมากที่สุด)

ท่านดื่มเครื่องดื่มอะไร 8 4.2.1 เหล้า ระบุ.....

8. 4.2.2 เบียร์ 8. 4.2.3 ไวน์ 8.4.2.4 อื่น ๆ.....

ดื่มเวลาไหน..... ดื่มกับใคร ระบุ.....

ดื่มที่ไหน ระบุ.....

จำนวนคนร่วมดื่มเครื่องดื่มแอลกอฮอล์ประเภทเดียวกับท่านทั้งหมด คน

ปริมาณการดื่มทั้งหมดเท่าไร ปริมาณการดื่มต่อคน

เล่าสถานการณ์จากการดื่ม (เช่น ทำไมท่านถึงดื่ม, ใครเป็นคนชวนท่านดื่ม, ดื่มเพื่อความ
 สนุกสนานในการเชียร์กีฬาหรือดื่มเพราะแข่งกีฬาแพ้, ขณะดื่มท่านมีความสุขสนุกสนานหรือไม่
 เพียงไร, มีอาการเมามาจากการดื่มหรือไม่ เมามาก เมาน้อย ขนาดไหน อาการเมาเป็นอย่างไร)

.....
 หลังดื่มแล้วอาการเป็นอย่างไร (เช่น หลังดื่มแล้วมีอาการเมาค้างหรือไม่ อาการเป็นอย่างไร)

.....
 คนที่มาร่วมในวันกีฬาหรือคณะกรรมการหมู่บ้าน ได้มีความคิดเห็นหรือมาตรการกับท่านอย่างไร
 (เช่น มีการตำหนิตาน ไม่อนุญาตให้ดื่ม หรือให้ดื่มปกติ หรือทุกคนช่วยกันดื่มจะได้เหมือนกัน
 กรรมการหมู่บ้านดักเตือนหรือไม่ หรือท่านโดนปรับจากการดื่มหรือไม่)

.....
 ท่านเสียเงินในการดื่มครั้งนี้หรือไม่ ไม่เสีย เสีย (กรุณาตอบรายละเอียดเพิ่ม)

ค่าเดินทาง ค่ารถ บาท ค่าเครื่องดื่มแอลกอฮอล์ บาท

ค่ากับแกล้ม บาท อื่น ๆ.....บาท

รวมค่าใช้จ่าย บาท

9. ในหนึ่งปีที่ผ่านมาถ้าคุณดื่มเครื่องดื่มแอลกอฮอล์เป็นประจำคุณเสียค่าใช้จ่ายการดื่ม
 เครื่องดื่มแอลกอฮอล์เดือนละ (เป็นประจำ หมายถึง ดื่มในปริมาณที่เกือบคงที่ เช่น
 ดื่มทุกวัน, ดื่มทุกสองหรือสามวัน, ดื่มทุกสัปดาห์ หรือ ดื่มทุกสิ้นเดือน)

8.1 ไม่ดื่มประจำ 8.2 ดื่มโดยไม่เสียเงิน

10. หนึ่งเดือนที่ผ่านมาคุณดื่มเครื่องดื่มแอลกอฮอล์หรือไม่ (ไม่นับการจิบหรือชิมเพียง 1-2 จิบ)

9.1 ไม่ดื่ม 9.2 ดื่ม

11. หนึ่งสัปดาห์ที่ผ่านมาคุณดื่มเครื่องดื่มแอลกอฮอล์หรือไม่ (ไม่นับการจิบหรือ ชิมเพียง 1-2
 จิบ)

10.1 ไม่ดื่ม 10.2 ดื่ม

12. ท่านดื่มแอลกอฮอล์ครั้งแรกอายุ ปี รวมระยะเวลาการดื่มถึงปัจจุบัน ปี

13. ท่านคิดว่าท่านจะหยุดดื่มเครื่องดื่มแอลกอฮอล์หรือไม่

13.1 ไป ด

13.2 หยุด จะหยุดดื่มเมื่อไหร่ (อีกกี่ปี)

เหตุผลที่ท่านจะหยุดดื่ม

แบบประเมิน AUDIT แบบคัดกรองปัญหาการดื่มสุราโดย องค์การอนามัยโลก

<p>1. คุณดื่มเครื่องดื่มที่มีแอลกอฮอล์บ่อยเพียงไร</p> <p>(0) ไม่เคยเลย (ข้ามไปข้อ 9 – 10)</p> <p>(1) เดือนละครั้งหรือน้อยกว่า</p> <p>(2) 2 – 4 ครั้งต่อเดือน</p> <p>(3) 2 – 3 ครั้งต่อสัปดาห์</p> <p>(4) 4 ครั้งขึ้นไปต่อสัปดาห์</p> <div style="text-align: right;"><input type="text"/></div>	<p>5. ในช่วงหนึ่งปีที่ผ่านมา มีบ่อยครั้งเพียงไรที่คุณไม่ได้ทำในสิ่งที่ควรจะทำตามปกติเพราะคุณมึนเมาไปดื่มเครื่องดื่มแอลกอฮอล์</p> <p>(0) ไม่เคยเลย</p> <p>(1) เดือนละครั้งหรือน้อยกว่า</p> <p>(2) เดือนละครั้ง</p> <p>(3) สัปดาห์ละครั้ง</p> <p>(4) ทุกวัน / เกือบทุกวัน</p> <div style="text-align: right;"><input type="text"/></div>
<p>2. เวลาที่คุณดื่มเครื่องดื่มแอลกอฮอล์ คุณดื่มประมาณวันละกี่มาตรฐาน</p> <p>(0) 1 หรือ 2 มาตรฐาน</p> <p>(1) 3 หรือ 4 มาตรฐาน</p> <p>(2) 5 หรือ 6 มาตรฐาน</p> <p>(3) 7 หรือ 8 หรือ 9 มาตรฐาน</p> <p>(4) มากกว่า 10 มาตรฐาน</p> <div style="text-align: right;"><input type="text"/></div>	<p>6. ในช่วงหนึ่งปีที่ผ่านมา มีบ่อยครั้งเพียงไรที่คุณต้องรีบดื่มเครื่องดื่มแอลกอฮอล์ทันทีในตอนเช้า เพื่อจะได้ดำเนินชีวิตตามปกติ หรือถอนอาการเมาค้างจากการดื่มหนักในคืนที่ผ่านมา</p> <p>(0) ไม่เคยเลย</p> <p>(1) เดือนละครั้งหรือน้อยกว่า</p> <p>(2) เดือนละครั้ง</p> <p>(3) สัปดาห์ละครั้ง</p> <p>(4) ทุกวัน / เกือบทุกวัน</p> <div style="text-align: right;"><input type="text"/></div>
<p>3. คุณดื่มเครื่องดื่มแอลกอฮอล์ตั้งแต่ 6 มาตรฐานขึ้นไป (เบียร์ 4 กระป๋องหรือ 2 ขวดใหญ่ขึ้นไป, เหล้าวิสกี้ 3 เป๊กขึ้นไป) บ่อยครั้งเพียงไร</p> <p>(0) ไม่เคยเลย</p> <p>(1) เดือนละครั้งหรือน้อยกว่า</p> <p>(2) เดือนละครั้ง</p> <p>(3) สัปดาห์ละครั้ง</p> <p>(4) ทุกวัน / เกือบทุกวัน</p> <div style="text-align: right;"><input type="text"/></div> <p><u>หมายเหตุ</u> ถ้าคะแนนรวมข้อ 2, 3 เท่ากับ 0 ข้ามไปตอบคำถามข้อ 9 และ 10</p>	<p>7. ในช่วงหนึ่งปีที่ผ่านมา มีบ่อยครั้งเพียงไรที่คุณรู้สึกไม่ดี โกรธ หรือเสียใจ เนื่องจากคุณได้ทำบางสิ่งบางอย่างลงไป ขณะที่คุณดื่มเครื่องดื่มแอลกอฮอล์เข้าไป</p> <p>(0) ไม่เคยเลย</p> <p>(1) เดือนละครั้งหรือน้อยกว่า</p> <p>(2) เดือนละครั้ง</p> <p>(3) สัปดาห์ละครั้ง</p> <p>(4) ทุกวัน / เกือบทุกวัน</p> <div style="text-align: right;"><input type="text"/></div>
<p>4. ในช่วงหนึ่งปีที่ผ่านมา มีบ่อยครั้งเพียงไรที่คุณพบว่า คุณไม่สามารถหยุดดื่มได้ หากได้เริ่มดื่มเครื่องดื่มแอลกอฮอล์ไปแล้ว</p> <p>(0) ไม่เคยเลย</p> <p>(1) เดือนละครั้งหรือน้อยกว่า</p> <p>(2) เดือนละครั้ง</p> <p>(3) สัปดาห์ละครั้ง</p> <p>(4) ทุกวัน / เกือบทุกวัน (2) เดือนละครั้ง</p> <div style="text-align: right;"><input type="text"/></div>	<p>8. ในช่วงหนึ่งปีที่ผ่านมา มีบ่อยครั้งเพียงไรที่คุณไม่สามารถจำได้เกิดอะไรขึ้นในคืนที่ผ่านมาเพราะว่าคุณได้ดื่มเครื่องดื่มแอลกอฮอล์เข้าไป</p> <p>(0) ไม่เคยเลย</p> <p>(1) เดือนละครั้งหรือน้อยกว่า</p> <p>(2) เดือนละครั้ง</p> <p>(3) สัปดาห์ละครั้ง</p> <p>(4) ทุกวัน / เกือบทุกวัน</p> <div style="text-align: right;"><input type="text"/></div>
<p>9. ตัวคุณเองหรือคนอื่น เคยได้รับบาดเจ็บซึ่งเป็นผลจากการดื่มเครื่องดื่มแอลกอฮอล์ของคุณหรือไม่</p> <p>(0) ไม่เคยเลย</p> <p>(2) เคยแต่ไม่ได้เกิดขึ้นในปีที่ผ่านมา</p> <p>(4) เคยเกิดขึ้นในหนึ่งปีที่ผ่านมา</p> <div style="text-align: right;"><input type="text"/></div>	<p>10. เคยมีแพทย์ บุคลากรทางการแพทย์ เพื่อน ญาติพี่น้อง แสดงความเป็นห่วงเป็นใยต่อการดื่มเครื่องดื่มแอลกอฮอล์ของคุณ</p> <p>(0) ไม่เคยเลย</p> <p>(2) เคยแต่ไม่ได้เกิดขึ้นในปีที่ผ่านมา</p> <p>(4) เคยเกิดขึ้นในหนึ่งปีที่ผ่านมา</p> <div style="text-align: right;"><input type="text"/></div>
<p><u>หมายเหตุ</u> 1 ดั้มมาตรฐาน เท่ากับ เหล้าแดง (35-40%) 2 ฟาใหญ่, เบียร์ (5%) 1 กระป๋อง, ไวน์แก้ว (12%) 100 ซีซี, น้ำขาว อุ กระแส (10%) 3 เป๊กหรือตอง หรือ สาโท สุราแช่ สุราพื้นเมือง (6%) 4 เป๊กหรือตอง</p>	

ส่วนที่ 5 ในหนึ่งปี ที่ผ่านมามีท่านเคยทำ หรือ เกิดเหตุการณ์ต่อไปนี้หรือไม่

คำถาม	ไม่เคย	เคย	ไม่เข้า ข่าย
1. การดื่มแอลกอฮอล์เคยทำให้เกิดผลเสียต่อชีวิตสมรส หรือความสัมพันธ์ใกล้ชิดกับคนรักของคุณ			
2. การดื่มแอลกอฮอล์เคยทำให้เกิดผลเสียต่อความสัมพันธ์กับสมาชิกในครอบครัว รวมทั้งลูกของคุณ			
3. คู่ครองของคุณเคยบอกว่าจะเลิกกับคุณเพราะการดื่มเครื่องดื่มแอลกอฮอล์ของคุณ			
4. การดื่มแอลกอฮอล์เคยทำให้เกิดผลเสียต่อความสัมพันธ์กับเพื่อนฝูงหรือสังคม			
5. ทะเลาะวิวาทขณะดื่มเครื่องดื่มแอลกอฮอล์			
6. เคยมีปัญหาทางกฎหมายที่เกี่ยวข้องกับการดื่มเครื่องดื่มแอลกอฮอล์			
7. มีปัญหาทางกฎหมายเองจากการขับรถหลังดื่มเครื่องดื่มแอลกอฮอล์หรือไม่			
8. เกิดอุบัติเหตุจากการขับขี่ยานพาหนะ			
9. การดื่มเครื่องดื่มแอลกอฮอล์เคยทำให้เกิดผลเสียต่อการทำงาน การเรียน หรือโอกาสที่จะได้งานทำของคุณ			
10. การดื่มเครื่องดื่มแอลกอฮอล์เคยทำให้เกิดผลเสียต่อการทำงานบ้านของคุณ			
11. การดื่มเครื่องดื่มแอลกอฮอล์ทำให้เกิดปัญหาทางการเงินต่อคุณ			
12. เคยมีปัญหาทางสุขภาพร่างกายที่เกี่ยวข้องกับการดื่มเครื่องดื่มแอลกอฮอล์			
13. เคยรู้สึกผิดหรือเสียใจหลังดื่มเครื่องดื่มแอลกอฮอล์			
14. เคยรู้สึกไม่พอใจเพราะมีคนวิจารณ์เกี่ยวกับการดื่มเครื่องดื่มแอลกอฮอล์ของคุณ			
15. เคยตกงานหรือเกือบบอกจากงานเนื่องจากการดื่มเครื่องดื่มแอลกอฮอล์			

* หมายเหตุ * ไม่เข้าข่าย หมายความว่า ไม่มีโอกาสจะเกิด เช่น ไม่มีคู่ครอง

จุฬาลงกรณ์มหาวิทยาลัย

VITAE

Full name: Thanawat Rattanawitoon

Nationality: Thai

Gender: Male

Date of Birth: December 14, 1975

Education

June 2005 Bachelor of Sciences and Health
Sukhothai Thammathirat Open University.

Employment history

December 1, 1995 Thai civil servant as public health worker administrator
Nan Public Health Provincial, Nan Province,
Thailand.

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย