PSYCHOPATHOLOGICAL CHARACTERISTICS OF PATIENTS WITH ALCOHOL USE DISORDERS

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Thesis
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PSYCHOPATHOLOGICAL CHARACTERISTICS OF PATIENTS WITH ALCOHOL USE DISORDERS

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ABSTRACT

This descriptive study had the objective of studying the psychopathology of patients with alcohol use disorders, and determining if there were any correlations between alcohol consumption behavior and psychopathological characteristics among 200 patients who were receiving treatment at Suanprung psychiatric hospital. Two research tools were used in this study, a personal information survey pertaining to alcohol consumption, and the Thai version of the Millon Clinical Multiaxial Inventory-III (MCMI-III). A base rate score of 85 or higher on MCMI-III indicated the presence of a disorder. Descriptive statistics were used to analyze the personal information, alcohol consumption and psychopathological characteristics. A t-test was used for each comparison between psychopathological characteristics and alcohol consumption behaviors. The results revealed that most of the sample group (83.5%) had psychiatric co-morbidity. When considering Multiaxial Assessment, it was found that 55.5% of the sample group had Axis II personality disorders. The three most common personality disorders were dependent 24.0%, negativistic (passive-aggressive) 16.5%, and depressive 13.0%. 80.5% of the group had Axis I clinical syndromes with the three most common groups being anxiety 63.0%, alcohol dependence 62.0% and dysthymia 12.0%. Additionally, it was found that the sample group displayed a variety of patterns of alcohol consumption and psychopathological symptoms. The results of the study showed a rather high rate of psychopathology among patients with alcohol use disorders, with both clinical syndromes and personality disorders, which might present obstacles to the treatment of alcohol use disorders or stall the results of treatment. Therefore, the assessment of psychopathological characteristics of patients with alcohol use disorders must be comprehensive, so that the patients receive the benefits of treatment and accurate diagnosis, drawing from their personality type.

KEY WORDS : ALCOHOL USE DISORDERS /
PSYCHOPATHOLOGICAL CHARACTERISTICS

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PSYCHOPATHOLOGICAL CHARACTERISTICS OF PATIENTS WITH ALCOHOL USE DISORDERS

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บทคัดย่อ

การศึกษาเชิงพรรณนาครั้งนี้มีวัตถุประสงค์เพื่อศึกษาลักษณะพยาธิสภาพทางจิตของผู้ป่วยโรคติดสุราและความเกี่ยวข้องระหว่างพฤติกรรมการดื่มสุรากับลักษณะพยาธิสภาพทางจิตของผู้ป่วยโรคติดสุรา โรงพยาบาลสวนปรุง จำนวน 200 คน เครื่องมือที่ใช้ในการศึกษา มี 2 ส่วน คือ แบบสัมภาษณ์ข้อมูลส่วนบุคคลและแบบทดสอบ MCMI-III ฉบับภาษาไทย ซึ่งมีเกณฑ์ว่า Base Rate (BR) 85 ขึ้นไปถือว่ามีความผิดปกติ ใช้สถิติเชิงบรรยายในการวิเคราะห์ข้อมูลส่วนบุคคลและลักษณะพยาธิสภาพทางจิต การเปรียบเทียบความแตกต่างของลักษณะพยาธิสภาพทางจิตกับพฤติกรรมการดื่มสุราโดยใช้ t-test ผลการศึกษาพบว่ากลุ่มตัวอย่าง 83.5% มีอัตราการเกิดโรคจิตเวชร่วม โดยใน Axis II พบบุคลิกภาพผิดปกติ 55.5 % ประเภทบุคลิกภาพผิดปกติที่พบมากที่สุด 3 ลำดับแรกคือประเภทพึ่งพิง (Dependent) 24.0%, ดื้อเงียบ (Negativistic) 16.5% และซึมเศร้า (Depressive) 13.0% ใน Axis I พบกลุ่มอาการทางจิตเวช 80.5%โดยกลุ่มอาการที่พบมากที่สุด 3 ลำดับแรกคือ กังวล (Anxiety) 63.0%, ติดสุรา (Alcohol dependence) 62.0% และซึมเศร้า (Dysthymia) 12.0% นอกจากนี้ยังพบว่ากลุ่มตัวอย่างที่มีพฤติกรรมการดื่มสุราที่แตกต่างกันมีลักษณะพยาธิสภาพทางจิตที่แตกต่างกัน ผลการศึกษานี้แสดงให้เห็นถึงลักษณะพยาธิสภาพทางจิตของผู้ป่วยโรคติดสุราทั้งบุคลิกภาพผิดปกติและกลุ่มอาการทางจิตเวชในอัตราที่ค่อนข้างสูง ซึ่งอาจเป็นอุปสรรคต่อการบำบัดรักษาหรือทำให้ผลการรักษาไม่ดีเท่าที่ควร จากการวิจัยนี้จึงเสนอแนะว่าควรประเมินลักษณะพยาธิสภาพทางจิตในผู้ป่วยโรคติดสุราให้ครอบคลุมเพื่อให้ผู้ป่วยได้รับประโยชน์สูงสุดจากการรักษา และเป็นแนวทางในการตัดสินใจเลือกการบำบัดรักษาให้เหมาะสมกับผู้ป่วย โดยดูจากพื้นฐานบุคลิกภาพและโรคร่วมทางจิตเวช

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CHAPTER I
INTRODUCTION

Background and significance of the problem

The consumption of alcohol is one of the most important problems of the world and the situation is getting more severe each day as seen in the report of the WHO, which found that about two billion people consume alcohol and 76.3 million people are diagnosed with alcohol use disorders. Additionally, alcohol is also a major cause of 1.8 deaths in the population (3.2% of all causes of deaths) (1). For Thailand, alcohol is considered a legal addictive substance and is widely in accepted by society, which according to the WHO ranking, it was found that Thais are 42nd among the countries that consume the most alcohol, especially Spirits alcohol, in which the country ranks 6 (1). From the investigation of the National Statistics Office in 2007, it was found that 14.9 million of the population 15 years and above, or 29.3%, where men drank six times more than women, and individuals presiding outside municipalities drank more than individuals living in those areas, specifically 31.0% and 25.4% respectively. The youth population consuming alcohol was as high as 21.9% of the population, and the working group had the highest percentage of alcohol consumption at 34.4% (2). From the study of the causes of diseases of Thai people in 1999, the problem of alcoholism in terms of Years Lived in Disabilities (YLD) was ranked two for men, 8%, which ranks 11th among Disability Adjusted Life Years (DALYs), 2% (3). From the investigation of the frequency of psychological disorders in Thailand, which is a national study of conducted by Siriwanarangsun P et al. on a population sample of 11,700 people, it was found that the frequency of alcohol use disorders was 28.52%, with men comprising 46.08% and 10.0% women (4). A study of the frequency and state of mental health of Thai alcoholics by Sinlapakit P et al. found that that 9.3% of the sample group was considered alcoholic and 8.3% had

tendencies (5), and can be seen that alcohol is an important problem in psychiatric work.

From the progress report of Suanprung Psychiatric hospital , Chiang Mai, which is a psychiatric hospital in the North of Thailand, and is responsible for areas 9 and 10, covering 13 northern provinces with diagnosis, therapeutic and rehabilitation services for those with mental health problems and complex psychiatric cases, as well as mental disorders as a result of addiction, with in and outpatient services, it was found that that between 2006-2008 patients receiving treatment for Alcohol related disorders, numbered 5,551, 5,776 and 5,777 respectively, and those receiving inpatient services numbered 1,871, 1,796 and 1,705 respectively. Of this number, 511, 552 and 1,064 were diagnosed with Alcohol used disorders, thus averaging 709 patients per year (6), which included new and old patients with relapses causes them to seek repeated treatment.

The treatment of alcoholic patients is considered is difficult and challenging endeavor due to the regular increase of new patients along with old patients who suffered from relapses as well. The cause of these relapses include the individuals themselves having cravings for alcohol, and is found to be the root cause of relapses at a high to highest level (42.2%). Environmental causes, namely having access to sources of alcohol in the community with a cause at a high to highest level at 81.2% (7). There are numerous studies on the psychopathology of those with Alcohol use disorders, studied in various contexts, which found that those with Alcohol use disorders displayed co-morbidity, namely Mood disorders such as Major depressive disorder, Bipolar I disorder (8-15), Anxiety disorders such as Generalized anxiety disorder, Posttraumatic Stress Disorder (PTSD) (8-12, 16-17) Drug abuse (8, 18), and Personality disorders (8, 19-23). It was found that alcoholics had high instances of abnormal personalities as well (19-23) such as in the study of Bowden-Jones et al. who found that the frequency of Personality disorders among alcoholics was 53% (20). Echeburu´a et al. found that co morbidity Personality disorders in 44% of alcoholics (23) which corresponds with the data from the National Epidemiologic Survey on Alcohol and Related Conditions which studied co morbidity Personality disorders in alcoholic patients and found that 28.6% had at least one personality disorder (25) usually belonging to Personality disorders clusters B and C (19-23, 25-

27). The most common types of Personality disorders are Antisocial personality disorder (23,25-26,28-32) Borderline personality disorder (19,21) Avoidance personality disorder (21,26) Dependent personality disorder (22) and Obsessive compulsive personality disorder (23). It can be seen that the personality characteristics of those with Alcohol use disorders are different (22, 23, 25) which may change depending on the assessment tools used, the severity of Alcohol abuse or Alcohol dependence, gender, age, and race (22, 23). The study of the psychopathology of patients with Alcohol use disorders will induce the understanding of the fundamental mechanisms of the patient which can be used as an approach in their treatment (34). Moreover, awareness of the psychopathology that is co-morbid such as Personality disorders can also help in therapy and solve the problem of building a therapeutic relationship, cooperation, or the patient's resistance to treatment (35, 36). Most therapy programs for alcoholics do not take into consideration the psychopathology of the patients such as Personality disorders and therefore a new kind of therapy should be developed to address co morbidity in alcoholic patients (21).

In order to assess the characteristics of psychopathology such as personality or group of conditions which must be assessed, there are numerous mechanisms such as the self-report inventory, clinical interview, or projective techniques etc. (34, 37, 38). Most research often utilize the self-report inventory as an assessment tool to evaluate patients because it allows the patient to report on themselves, economizes time, has a clear logical framework (34), and from literature review it was found that the Millon Clinical Multiaxial Inventory (MCMI) is one of the most widespread (34, 39-42) with other 650 researcher using the MCMI (34). The MCMI was created by Millon, an American psychologist, with the first edition in use in 1977 and over the course of 20 years were revised and improved. The latest edition, MCMI-III, was published in 1994, which was developed to correspond to the DSM-IV, with the various scales developed for ease of interpretation, because it utilizes the same terminology as the DSM-IV, and is very effective in assessing abnormality, taking about 20-30 minutes, which is considered very short for a its kind. The MCMI-III consists of 175 questions, with true or false answers. The profile from the test is consistent with the Multiaxial Assessment system of the DSM-IV, which is expressed in terms of 11 clinical personality patterns and 3 severe personality pathology, Axis II

personality as well as 7 clinical syndromes, and 3 severe clinical syndromes according to Axis I of the Multiaxial Assessment. There are also questions to ensure the reliability of the answers in three other aspects (21, 34, 37, 39-45). In Thailand, Srisukho Th and Phungpong S translated MCMI-III into Thai and found the reliance of MCMI-III for Thai psychiatric patients (37).

From the aforementioned problem and approach, the researcher is interested in studying the psychopathology of patients with Alcohol use disorders using the Thai version of the MCMI-III to conduct the study and incorporate the findings in developing a therapy that is more appropriate to the patient group.

Research Objectives

1. To study the psychopathological of patients with Alcohol use disorders
2. To study the correlation between alcohol consumption behavior and psychopathological of patients with Alcohol use disorders.

Research Questions

1. What are the psychopathological characteristics of patients with Alcohol use disorders?
2. How is alcohol consumption behavior related to psychopathological characteristics?

Scope of the Research

This study is the study of the psychopathology of patients with Alcohol use disorders, the sample group are randomly selected from the population which are patients who are diagnosed with Alcohol used disorders totaling 200 individuals, who are receiving treatment at Suanprung Psychiatric Hospital. The tools used to assess the psychopathology is separated into two parts namely the personal information sheet and the Millon Clinical Multiaxial Inventory-III (MCMI-III), Thai version.

Benefits

To know and understand the psychopathology of patients with Alcohol use disorders, which will provide the information needed in the approach to developing appropriate new forms of therapy and rehabilitation for patients with Alcohol use disorders.

Definition of Terms

1. Psychopathological characteristics and Comorbid Psychiatric Disorders refer to the characteristics of Clinical personality patterns and Clinical syndromes which can be assessed by the MCMI-III Thai version. Which totaling 24 clinical scales consists of 11 clinical personality patterns namely Schizoid, Avoidant, Depressive, Dependent, Histrionic, Narcissistic, Antisocial, Sadistic (Aggressive), Compulsive, Negativistic (Passive-Aggressive), Self-Defeating and 3 severe personality pathology, namely Schizotypal, Borderline, and Paranoid in Axis II and 7 Clinical Syndrome groups, namely Anxiety, Somatoform, Mania, Dysthymia, Alcohol Dependence, Drug Dependence, PTSD as well as 3 severe clinical syndromes, namely Thought disorder, Major depression, and Delusional in Axis I by using the Base Rate (BR) score value of 85 or above as an inclusion criteria, namely for the 14 Personality disorders scale, BR 85 indicated the presence of a disorder. For 10 Clinical syndromes, BR 85 indicated prominence of a syndrome which is not related to the diagnosis and coding of disorders according to the ICD-10 in the medical record.

2. Patients with Alcohol use disorders refer to individuals who have been diagnosed by psychiatrists with Alcohol use disorders (Alcohol abuse and Alcohol dependence) according to the DSMV-IV codes 305.00 and 303.90, according to the American Psychiatric Society. Nevertheless, this study adheres to the codes of the International Classification of Diseases and Related Health Problems, 10^{th} revision (ICD-10) of the World Health Organization, codes F10.1 and F10.2 who were receiving treatment at Suanprung Psychiatric Hospital, Chiang Mai.

3. Alcohol consumption behavior refers to behaviors pertaining to alcohol consumption which is compiled from the questionnaire (question 1. Age of first alcohol consumption, 3. Duration of alcohol consumption, 7. Volume of consumption, and 8. Frequency of alcohol consumption over the past year).

CHAPTER II
LITERATURE REVIEW

In this study of the psychopathology of patients with Alcohol use disorders, the following literature was reviewed.

1. Alcohol use disorders
2. Co morbid Psychiatric disorders of Alcohol use disorders
    - 2.1 Personality disorders
    - 2.2 Mood disorders
    - 2.3 Anxiety disorders
3. The MCMI-III
4. Multiaxial Assessment

1. Alcohol use disorders

Alcohol

According to the Liquor Law (B.E. 2493), Liquor refers to the substances or mixtures that contain alcohol that is able to be consumed or not consumed, but is consumable once it is mixed with water or other liquids (46). Alcohol is the chemical composition that includes all forms of ethyl alcohol such as liquor, beer, wine, which serves as a neuro-inhibitor, resulting in its effects on the control of movement, emotions and intelligence (47). The level of alcohol in the blood stream is highest in the first 45-60 minutes after its consumption, and the intoxication level is higher in women than in men when consumed at the same quantity. Most alcohol is excreted from the body by the metabolic reactions in the liver, but about 2-3% will be burned in other organs, and 2-3% will be excreted by urination and sweat (48).

Pattern of drinking (3)

Pattern of drinking refers loosely to how a person drinks, and consist of numerous factors such as who the person is (sex, age, health), where the person drinks (home, or shop), when the person drinks (recreation, with food, or after work), what the person drinks (rice wine, moonshine, beer, wine), how the person drinks (small sips, bottoms up, binge drinking), the time (evening, all day). Each way of drinking affects health and society different, therefore in medical work individuals are classified into the following groups of drinking 1) Low risk drinking refers to drinking no more than 2 standard drinks a day, and has at least 2 days without drinking in a week. This way of drinking can also be called safe drinking, except with individuals with personal illness, pregnant or breast feeding women. 2) Hazardous/Risky drinking group refers to drinking a quantity or such a way as to increase to risk of developing malevolent effects on the body and mind, as well as society, which can be directed at the drinker alone or to other as well, even though the person drinking may not be suffering from any illnesses. For women, drinking more than 4 standard drinks a day, and for men more than 5 standards drinks day. 3) Harmful use refers to consuming alcohol to the extent that it is followed by malevolent a consequence which affects the mind and body, jobs, or relationships with others. 4) Alcohol Dependence refers to the allocation of most of one's time to drinking, resulting in the lack of responsibility to other areas of one's life, lacking control over the volume, frequency of consumption, unable to stop or experiencing withdrawal with any attempts to cease the activity.

Alcohol use disorders

Alcohol use disorders are categorized as Alcohol related disorders, where it is separated into two types of disorders, namely Alcohol dependence and Alcohol abuse (49). Presently, there are two criteria used to assess alcohol use disorders, namely 1) Diagnostic and Statistical Manual Disorders (DSM) which has been improved to the Diagnostic and Statistical Manual Disorders, text revision (DSM –IV-TR) of the American Psychiatric Society, however the diagnostic criteria in the DSM0-IV-TR remained unchanged from the DSM-IV. 2) The International Classification of Disease, Tenth Revision (ICD-10) of the WHO. Both criterions are

similar to each other, with both system adopting the terminology alcohol dependence, the difference is that the ICD-10 contains six criterion but the DSM-IV-TR has seven criterion, with the first two criterion being tolerance and withdrawal for both systems. The remaining uses different but similar explanations (50) that is there is large volumes of drinking or longer than intended, desire to drink all the time or having cravings to drink unable to control or stop drinking, spending all their time in search of alcohol, having to abstain from or reduce social functions, jobs or other recreation due to their consumption of alcohol and continuing to drink alcohol despite knowing the adverse effects on the mind and body (49, 50). As for the criterion on alcohol abuse, the terminology adopted by the DSM-IC-TR is “Alcohol abuse” whereas the ICD-10 adopts the term “Harmful use”, whereby the harmful use criteria of the ICD-10 uses the explanation that “there is clear evidence that alcohol causes adverse effects on the body, mind as well as reduce the ability to make decisions in terms of one job” whereas the DSM-IV-TR is more specific in its definition of “Alcohol abuse explaining that it consists of inappropriate consumption of alcohol which is display in one or more symptoms over the past 12 months, consisting of 4 criteria (50) namely 1) there is regular alcohol use to the extent that it hinders one ability to carry out important tasks at work, home or school such as missing work or school, affecting performance at work or school, forced to take leave from work or school. 2) There is regular alcohol use in situations that may cause bodily harm such as drunk driving. 3) There are legal problems as a result of regular alcohol use such as civil disobedience as a result of drunkenness or violence. 4) Continued alcohol use despite causing or stimulating relationship problems with others or other social problems such as domestic arguments over drinking (49).

The diagnostic criteria for both systems, the DSM-Iv and ICD-10, are similar (50). Since the ICD-6 in 1952, which is the first time this system had a criteria to diagnose psychiatric disorders, which was published in the same year as the DSM-I, but the ICD-6 received unsatisfactory feedback from users in America and other countries, and was used only in Finland, New Zealand, Peru, Thailand and the United Kingdom (51), which then resulted in efforts to try to improve the diagnostic criteria of both system to be similar as possible since (52). In 1994, the DSM-IV was developed to correspond with the ICD-10 which was published before in 1992. The

general feedback was clear that the diagnostic criteria for the DSM-IV is able to correspond to the ICD-10 and is able to support the same report system as adopted by most countries which adhered to the ICD-10 because Europe and numerous other countries around the world have adopted the ICD-10, where all the criteria in the DSM-IV also exists in the ICD-10. However the diagnostic criteria of the ICD-10 is not replicated in the DSM-IV because the ICD-10 covers more disorders but the DSM-IV consists of only diagnostic criteria for psychiatric disorders, and therefore the group classifications of the DSM-IV were designed to adhere to those of the ICD-10 (53). The codes for alcohol use disorders, which consists of alcohol dependence uses the code 303.90 in the DSM-IV and the code F10.2 in the ICD-10. Alcohol abuse uses the code 305.00 in the DSM-IV and the code F10.1 in the ICD-10 (52). This research uses the diagnostic criteria of the DSM-IV according to the American Psychiatric Society and the disorder code of the ICD-10 of the WHO, so as to correspond with the statistics available in Thailand.

Factors relating to alcohol use

From the literature review of patients with Alcohol use disorders, it was found that there are numerous factors related to Alcohol dependence, whereby all the factors are interrelated, making it difficult to conclude any particular factor is the root cause of Alcohol dependence, but the culmination of many factors able to be explained biopsychosocially (54) as follows

1. Biological Factors

1.1 Family and Genetics

There is evidence in the form of numerous research and studies that clearly show drug abuse, especially Alcohol abuse is greatly influenced by genetics. Most genetic research centers around alcohol users because alcohol is legal addictive substance, with large numbers of people suffering from Alcohol dependence, as well as test on animals that support that genetics influences Drug abuse, and human experiments such as studies of twins, families with a histories of alcoholism and studies of adoptive children, all indicate that individuals who are genetically vulnerable are likely to suffer from drug abuse (55). From studies of patients suffering

from alcoholism, which found that genetics was one of the causes, it was found that close relatives are three times more likely to suffer from alcoholism (56). This corresponds with the report of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) which studies alcoholics in the United States and found that children from families with a history of Alcohol dependence are 4-10 times more likely to develop Alcohol dependence than children who do not have alcoholics in the family (57). This is especially the case with studies on males, where it was found that genetics played a more significant role on Alcohol dependence than on female cases. This also includes studies on twins, where it was found that identical twins were 60% more likely to develop Alcohol dependence if one of the twins has Alcohol dependence (56). Additionally, there were also studies on twins as to the influence of genetics and upbringing and found that people addicted to legal substances such as alcohol are initially influenced by genetics, but people addicted to illegal substances such as marihuana, cocaine are more influenced by upbringing and the environment (55). In the present genetic research has advanced to the molecular level to the extent that the genes responsible for Alcohol dependence has been isolated (58) such as the study Collaborative Study on the Genetics of Alcoholism (COGA), which is a genetic study which found that chromosomes 1, 2, 7, and 11 influenced alcoholism (55), which corresponds to the study by Ginter and Simko, which found that chromosomes 4, 7, 8, 11, 15, 20, which are chromosomes that influence the transmission of dopamine, is related the risk of alcoholism (59). This shows that Alcohol dependents have a genetic predisposition. In addition to genetic research, it was also discovered that alcoholism is related to nationality and race (55, 30), with Caucasians with the highest volume of alcohol consumption, followed by Hispanics, and Africans. Asians in general drink less than Americans (30).

1.2 Neurobiological

Studies on neurobiological systems, which studies about the functioning of the brain, found that the brain contains the pleasure center, which was discovered by James Olds over 40 years ago, which is able to explain the pleasure pathway in the Mesolimbic system following the consumption of addictive substances. The substances are then sent to the Ventrotegmental area of the brain and then to the

Nucleus accumbens. It is in this area that dopamine, a neurobiological chemical, causes the sensation of pleasure to be released in great amounts with addictive substances (55). Alcohol also increases the function of the opioid in the brain (58) causing users or drinkers to fee pleasure. The Nucleus accumbens is considered to have a significant role in substance addiction, creating craving, which is then sent to the prefrontal cortex, which is responsible for thought, decision making, and interpretation of the substance use experience to equal to pleasure (55). Additionally, a relationship was found with the reinforcement reward system in the limbic area, where the addictive substance will stimulate the user to know that this craving is like an innate drive of the user, causing favorable responses and continued repeated use, until the craving increases (49).

2. Psychological Factors

2.1 Psychosexual development

According to Sigmund Freud's theory of psychoanalysis, the development of the human personality and behavior undergoes five psychosexual development stages. At each stage, any fixation at any stage can have consequences later in life. In the case of alcoholics, psychosexual development is believed to have a fixation at the oral stage, between infancy and 18 months, where the pleasure center of the child is centered around the mount, which Freud believed that children with fixation at this state will induce some sort of oral behavior in adulthood, from putting stuff in one's mouth such as a cigarette, gum, or eating snacks, as well as alcohol (60, 61).

2.2 Learning

The positive effects of alcohol consumption, such as the reduction of withdrawal symptoms, stress, inducing relaxation, reinforce drinking behavior (47).

2.2.1 Positive Reinforcement

It is the reinforcement of stimuli that causes pleasure, and induces further stimulation (60). Most drugs have neurological effects, which can be explained by neurobiological influence, which explains that our brain houses our pleasure center, which following the consumption of drugs such as alcohol, stimulates

this pleasure center in the brain (55). This is because alcohol induces the secretion of dopamine in the Mesolimbic system, which is part of the central brain. Additionally, alcohol also increases the level of opioid in the brain (58), therefore with every consumption of alcohol; there is the sensation of pleasure, relaxation, causing the individual to continue drinking in order to continue feeling pleasure, which reinforces alcohol consumption. There are numerous studies that show clearly that users develop a pleasurable sensation, such as studies where animals are injected with addictive substances such as cocaine and alcohol, which found that the animals developed a sensation of pleasure, which shows that pleasure, is induced with the introduction of addictive substances, with no influence from society and culture. Human studies found that social contexts may be involved in the stimulation of to use addictive substances, but most found that the is continued drug because there is greater feeling of happiness and contentment in drug abuse (55), such as the study of Thai male drinking by Assanangkornchai S et al, which found that most Alcohol dependents (61%) are solitary drinkers, where most of the drinkers expect the positive effects of alcohol of relaxation of contentment (58) stimulating their continued use.

2.2.2 Negative Reinforcement

Except for studies on the happiness and contentment induced by addictive substance, numerous studies show how addictive substances are able to reduce the feeling of suffering and other negative emotions because numerous people depend on alcohol to avoid negative feelings, and discontentment with life, to reduce physical pain or use alcohol as a relaxant. These occurrences are referred to in a variety of names such as tension reduction, negative affect, self-medication (55) as well as to reduce withdrawal or psychiatric symptoms (54). Studies as to the cause of alcohol dependence believe that it is the result of the use of alcohol to relived negative emotions, such as drinking to forget about anxiety, drinking to reduce stress, for instance (57). This way of drinking is negatively reinforced by removing the stimuli that causes discontentment, therefore reinforcing the idea that drinking causes relaxation, freedom from anxiety, and therefore continues to drink.

2.3 Alcohol outcome expectancies

This is the individual belief or expectation that alcohol will give an emotional, cognitive and behavioral change such as expecting that alcohol allows them to express themselves freely without shyness (55). Goldman et al. separated alcohol outcome expectancies into three dimensions, namely 1) positive and negative expectations such as increase sociability and aggression 2) positive and negative reinforcement such as increase sociability and reducing stress 3) inducing alertness or calmness such as stimulating or suppressing sensations (58). The alcohol outcome expectation of individuals prior to actually drinking may be learned from the drinking experience of friends, commercials, or personal experience from other times of drinking (55). From the study of Chaiyakird P it was found that alcohol outcome expectations is a significant factor the convinces alcoholics to drink alcohol, whereby 83.80% of the sample group expected some sort of cognitive change with alcohol, 76.50% expected stress reduction, 42.13% expected feeling of dependence, 30.90% expected emotional change, 24.54% expected sexual stimulation change, and 22.69% expected courage to expression (63).

2.4 Personality

The relationship of personality in alcoholics is a complex issue. Research over the past 50 years offer few conclusions; despite clearer inclinations Antisocial personality disorders are prominent in alcoholics (22, 25-26, 28-32). However, there are numerous other research because the study of personality as the cause of alcoholism often uses terminology that is specific to their specific theories such as the Big Three theory of Eysenck (58) in the study of Müller et al. which found that alcoholics displayed signs of psychoticism and impulsiveness (64) or the DSM model such as evaluation by the MCMI of Millon as in the study of Echeburu´a et al. which found that alcoholics were 13.3% Dependent personality disorder and 10% Paranoid personality disorder and Obsessive compulsive personality disorder (22). The study of Craig found that African American males displayed signs of antisocial behavior with narcissistic, antisocial and paranoid personalities (43) or the use of structured interviews according to the DSM-III-R using the Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II) such as the study of Skodol et al. which

found that drug users displayed Borderline personality disorder (65) or the use of the Alcohol Use Disorder and Associated Disabilities Interview Schedule-DSM-IV (AUDADIS-IV). Other Antisocial Behavioral Syndromes such as in the study of Goldstein et al. which found that that antisocial syndromes are related to Alcohol use disorders (66). The Big Five theory in the study of Schoor et al. found that people with agreeableness are often influenced by peers to drink (67), and it can be seen that alcoholics have personality types that are different from the general population.

3. Social Factors

3.1 Social Culture

The social cultural context is considered to have significant influence to alcohol use. Numerous studies show that individuals with Alcohol use disorders are greatly influenced by societies that are experiencing great economic expansion, with the most common factors being unemployment, the number of alcohol products, the nature of the community, such as rural or urban communities, social mores or controls such as liqueur tax, age controls, or zoning, as well as a legal implications, whereby countries that have strict drinking laws are able to curb the rate of drinking (68). Additionally, cultural differences are another factor that is related to alcohol addiction, which must be considered because each culture has different level of tolerance for addictive substances. This means that the standard of drinking in each country is also different, such as in Korea, where it is expected that people drinking heavily in social occasions, such that cultures like this increases the rate of Alcohol abuse, which is rather high in Korea (55). Conversely, in China there is the traditional approach to alcohol as reliving tension or anxiety, where the Chinese traditional approach is being accepted after the economic revolution (69). However, countries with low economic status or countries that have limited or have strict control over drugs such as Mexico or Brazil, there is relatively low instances (55) or rich societies have higher numerous of patients with Alcohol use disorders, in contrast to poor societies with fewer opportunities to drink (68). Additionally, it was found that, individuals with seniority or high social status are often alcohol drinkers (29). For Thailand, alcohol is considered a legal addictive substances, and has been summarized by some as “Any day Thais are drunk” because Thais drink on all occasions, all festivals, where alcohol

is hidden in the rituals, traditions and culture of Thai, and therefore drinking behavior is common, especially with long weekend holidays such as Songkran, New Years, and other occasions (70) such as house warming, and not even excluding funerals, where the hosts will prepare food and drinks for the guests. In traditional festivals, drinking occurs in groups amongst friends and relatives (71). From the study of The Socio-Cultural Context Affecting on Alcohol Drinking Behavior in The Worker Of Dongkilek Village, Chachang Sub-district,San Kamphaeng District, Chiang Mai Province of Kamkan J which found that socio-cultural context affected alcohol drinking behavior because it is part of the way of life of the community, from the beliefs and various traditions such as the belief that illness are caused by spirits and perform various ceremonies revolving around ghost and ancestor worship in order to ensure peace. Alcohol is usually part of these ceremonies, which require that after the ceremony the offerings are consumed, not to mention the other alcohol bought to drink alcohol following the ceremony, which invokes conversation, which induces even more drinking. Additionally, the ghost worshipers are content with drinking alcohol the offer to the ghost spirits alcohol , feel that they have to drink what they offer, serving as an excuse to continue their behavior and support their habit and those of the community (72). This corresponds with the study of Buathong A who found that in communities where values are changing concerning the continuation of rituals and traditions, cultural influence still value parties that have alcohol as a component causing the rise of drinking amongst working-age women, which use it as leisure and for socializing (73). Similarly, the study of Assanangkornchai S et al. which studied the pattern of drinking in Thai men found that Alcohol dependents usually drink for pleasure, to celebrate with friends, drinking to relax and more than half of the sample group use their dinner time to drink (62). This also includes the study of Sukunta S et al. which studied the alcohol drinking behavior of people in Chiang Mai and found that 81.7% of drinker drank with friends, and often drink at restaurants or other entertainment venues (71).

3.2 Environment

The environment is another factor that influences alcohol addition, such as parents who drink are unable to set good examples for their children or a chaotic family, with feuding parents, or aggressive behavior (56) causing the family to develop stress, which is a major factors that induces and maintains drinking behavior. This family factor is one of the initial causes of drinking behavior, believing that drinking reduces stress or induces relaxation (54). This corresponds with the study of Schneider who found that people suffering from stress are affected by drinking, the illness, and the intensity of their alcohol use (10). This extends to groups of friends, whereby friends that influence drinking behavior are usually those who when they are drunk try to convince friends to drink, have behavior that is conducive to alcohol consumption or are best friends (42). Being in an environment surrounded by alcohol drinkers increases the chances of developing the behavior as well (68). Peer pressure causes problems within the family, at schools, social mores, which are important factors in alcohol dependency (47). This corresponds with the study of Schoor et al. who reported that having a large group of friends who drink is correlated to drinking behavior in early adulthood and being in groups who drink also plays a role in the development of alcohol dependency as well (67). Additionally, being in an environment with access to the sale of alcohol also plays a role in its consumption. In the mapping study of alcohol in the north, it was found that there are 816 places where alcohol is sold, 61.2% of which are in municipal areas, and 38.8% outside the municipal area. Most are in the form of grocer's shop, restaurants, entertainment venues, and small convenient stores (74). This corresponds with the study of the relationship between places where alcohol is sold and alcohol drinking behavior of Thaikla K which found that there are a total of 1,083 places where alcohol is sold in Chiang Mai, where most of the drinking occurred in restaurants, bars, BBQ buffets, karaoke bars, as well as community shops retailing home brew moonshine are at a high to dangerous risk (75). Additionally, it was found that most rural communities in Chiang Mai will have a village liqueur store, often sold with food or sour fruits, where alcohol drinkers usually drink during the evening after work, some using the liqueur store as a rendezvous point to meet, talk and celebrate (71). This corresponds with the study of Nadsasarn A who studied the causes of relapse drinking behavior of people

who have undergone therapy at the Chiang Mai Rehabilitation Center and found that one of the reasons of relapse is having a source of alcohol in the community as a very clear or extremely clear reason (7). An environment that has access to alcohol will without a doubt influence the drinking behavior of people more as can be seen in the study of Sinlapakit A et al. which found that the region with the most alcoholics is the north (10.5%) and the lowest is the south (6.0%) (5).

3.3 Race

In terms of race, it was found that there are numerous conflicting researches, such as some research finding that white people have the highest alcohol consumption, followed by Hispanics, and blacks. Asians drink less than Americans, with white drinking heavily between 18-25 years, with Hispanics drinking heavily from adulthood to old age, with the most intensity between 26-30 years (30). This corresponds with the study of Glanz et al. which found that Asians consumed less alcohol than whites and blacks (76), which differed from the information from the Epidemiologic Catchment Area (ECA) which found that Hispanics had the highest rate of alcoholism, and African-Americans and Caucasians with the least number of alcoholics (29). The study of the Substance Abuse and Mental Health Services Administration reported that Caucasians drank the most alcohol, followed by Hispanics and African-Americans (29).

2. Co morbid Psychiatric Disorders of Alcohol Use Disorders

From the literature review it was found that patients with Alcohol use disorder displayed co morbidity which is found in Axis I and Axis II according to the Multiaxial Assessment, with most of the disorders occurring with Alcohol use disorders in Axis I includes Mood disorders, such as Major depressive disorder, Bipolar I disorder (8-15), Generalized Anxiety Disorder, Posttraumatic Stress Disorder or PTSD (8-12, 16-17), Drug abuse (8, 18), as well as Personality disorders in Axis II which are most commonly found (8, 19-23) and are detailed as follows.

2.1 Personality Disorders

The Meaning of Personality disorders

Personality is the individual characteristics which is the culmination of the thoughts and feelings, perceptions and behaviors that an individual expresses to the world around them, whereby each individual will have different ways of expression especially in their interactions with others (77-78). If there are deviancies from the norm in the particular culture of the individual, and results in a failure to adapt or have inappropriate coping mechanisms that cause distress in their interactions with others causing suffering to those involved, but where the individual is not distressed, with the onset usually occurring in adolescence or early adulthood, it is considered personality disorders (79, 40, 61, 53).

Distinguishing Personality disorders

There are presently two popular systems to distinguish Personality disorders, name the DSM-IV of the American Psychiatric Society and the ICD-10 of the World Health Organization. Both systems place Personality disorders in various groups by the unique characteristics of the Personality disorders (49). For this research, the researcher has chosen to utilize the DSM-IV system of the American Psychiatric Society because the MCMI-III is used as the research tool in this study, which was developed for use with the DSM (39).

Personality disorders according to the DSM system

Personality disorders are categorized in the diagnosis of the all editions of the DSM, but only in three types, namely Paranoid, Obsessive-compulsive and Antisocial personality disorder. Other types, such as Borderline, have only just been added or in the case of inadequate personality, have been edited out of the criteria. The Personality disorders criteria of the DSM has been improved constantly, where the DSM-III in 1980, Personality disorders was distinguished in the Axis II, which means it has received great importance. Then with the DSM-III-R in 1987, and the DSM-IV in 1994, there have been efforts to increase the validity of the categorization of the various Personality disorders combined the findings from experience, experiments and observations from various publications, whereby the DSM-IV

attempted to show the culmination of clinical tradition and findings from research in order to better understand Personality disorders (80). The latest version, the DSM-IV-TR, was published in 2000 has no difference in the criteria used in the DSM-IV (81).

Personality disorders Criteria in the DSM System

Personality disorders according to the DSM-IV is separated into three large groups, namely Cluster A, with odd or eccentric clusters, with characteristics pertaining to personal experience such as unrealistic belief in luck or being different from others, consisting of Paranoid personality disorder, Schizoid personality disorder, and Schizotypal personality disorder. Custer B includes the dramatic, emotional or erratic cluster, overall being a person of extremes, sometimes destructive, consisting of Antisocial personality disorder, Borderline personality disorder, Histrionic personality disorder and Narcissistic personality disorder. Cluster include the anxious or fearful cluster with the main characteristics of being obsessed with self-criticism or lack of self-esteem consisting of Avoidant personality disorder, Dependent personality disorder and Obsessive-Compulsive personality Disorder (81, 82) which can be explained as followed (47, 49, 56).

1. Paranoid Personality Disorder This type of personality is distinguished by the lack of trust, obsessed with the paranoia with the honesty of those around them, especially the fidelity of their spouse, often interpreting the intentions of others in a negative way, thinking that others are trying to use them or trick them in some way, often very cautious at all times, sensitive to demeaning attitude or aggression, often unforgiving, often reacting with anger or quarrel.

2. Schizoid Personality Disorder this type of personality disorder often displays isolated behavior, having no desire to interact with others, preferring to remain alone, interested in solitary activities, lacking close friends, or a person to trust. There is limited emotional expression, often appearing cold, rigid, having no desire to develop emotional relationships with others, having little sexual interest in others, and often have no reaction to praise or insult.

3. Schizotypal Personality Disorder this type of personality disorder have skewed cognition or perceptions, having strange beliefs about special powers, the paranormal, luck, or the sixth sense, which does not correspond with the norms of

their particular culture. Emotional expression is inappropriate, with abnormal behavior, strange diction and speech patterns, often posing inquisition or suspicions, and ideas of reference, along with social deficiencies or interactions with others, often feeling anxious with meeting other people, regardless of closeness

4. Antisocial Personality Disorder This type of personality disregards or offends the rights of others, disrespect for rules and regulations, thus often resulting in arrests, often temperamental, aggressive, lack of sense of safety for themselves and others, unable to take responsibility for their job, lack of respectability in the workplace, lack of financial honesty, often lying, stealing to find benefits or personal gains, lack of guilt, remorse and empathy for others, with conduct disorders since at least the age of 15.

5. Borderline Personality Disorder This type of personality disorder is characterized by emotional fluctuations, extreme emotions, inappropriate anger, or problems controlling emotions, with uncertainty in their individuality. Their interactions with others are often violent and extremely unstable, between praise and insult, fear of abandonment, unable to cope with loneliness or being alone, therefore is able to interact with strangers quickly, with problems controlling themselves such as spending, sexual behavior, drug addition, to the extent that they cause detriment to themselves. Additionally, there is abnormal anxiousness, as well as intimidation or attempt to harm themselves or repeated attempts at suicide.

6. Histrionic Personality Disorder This type of personality disorder has a need of attention from others, feeling awkward and sad if attention is not given to them, extreme unrealistic expression like a performance, often using their appearance to draw the attention of others, often in a seductive way. Speech often does not include much substance by emphasizes emotions, which is quick to change, easily manipulated, and sees relationships with others as close than they really are.

7. Narcissistic Personality Disorder This type of personality disorder is obsessed with themselves, thinking that they are better and more important than others, believing that they are special, expecting others to treat them in a special way because they are more privileged, often arrogant, distant, often obsessed with dreams of success, power or beauty, wanting praise from others without caring for the

sentiment or desires of others. At times, they may seek personal gains from their relationships with others, and are often jealous of other or believing others of them.

8. Avoidant Personality Disorder This type of personality disorder are worried and sensitive to rejection or negative assessment, seeing themselves as unworthy, incompetent, lacking in social skills, therefore are not expressive with people who they do not know and it often cautious of relationships that are close because they are wary that they might express themselves in an embarrassing or funny manner, often avoiding activities that require interaction with others, except in instance where they are certain they are accepted.

9. Dependent Personality Disorder This type of personality disorder is characterize by dependence on others, desiring someone to take care of them, to be responsible for the various things in their life, lacking the courage to live life alone because they are afraid they will not be able to take care of themselves, fearful of being left to fend for themselves to the extent that they will give in to anything and cling on to other individuals all the time. They have difficulty making decisions in various aspects of their life, any decision must be advised or have the confidence of others, lacking the courage to initiate any project by themselves, because they are uncertain of their abilities. Additionally, they have difficulty expressing different opinions from others, especially those they depend on due to the fear that they will lose the assistance, and with the ending of a relationship they will try to find a new one to be a source of dependency.

10. Obsessive-Compulsive Personality Disorder This type of personality disorder is characterized by obsession with perfection, often fixated on minute details to the extent that they miss the purpose of the activity and disrupt the completion of the project, unwilling to transfer work to others until they are certain the person can carry out the task in according the form they have set and devote so much time to their work that they forget to rest or interact with others. They are also very righteous, ethically strict and moral, with a clear understanding of right and wrong, with a high tolerance for suffering, thrifty, seeing money as savings for the future in time of trouble. Some refuse to part with old broken things, despite it lacking any value or have no sentimental value. Additionally, they are inflexible, difficult to change, and have high anxiety when their daily routines are changed.

The study of Personality disorders in patients with Alcohol use disorders

Finding the correlation between alcoholism and personality beckons the question of "is the personality of individuals with alcoholism different from those who are not?" This is a question that numerous researchers have tried to answer. Evidence from research found that the study of the personality of alcoholics began between the 1930s and 1940s, but most of the research in circulation at the time contradicted each others in numerous areas albeit in terms of behavior or tools used to evaluate the personality of people in both groups and found no conclusions. In the 1950s the literature concerning the personality of alcoholics, but were unable to draw any conclusions due to the lack of sufficient evidence to specify the personalities of alcohol. In the 1960s interest in the study of personality was in decline until its revival in the 1970s where there are reports of behaviors that risk factors leading to alcohol dependence, however those behaviors were unable to conclude anything about personality. Later in the 1980s, there during was a revival in the interest in the study due to two major reasons, namely 1) an increase in the number of drug addicts during the 1960s and 1970s, with more reports of the differences in personality of alcoholics and non-alcoholics such as finding that alcoholics are often teenagers, rash, lacking self-control, open, and often uncooperative with the treatment 2) there are reports of the genetic factors, which is the basis that supports individual behavioral differences pertaining to alcohol use are often influenced by genetics (32).

In the past 20 years, there have been numerous continuous studies about the personality of alcoholics, which are mostly local studies, which found that alcoholics often have a high co morbidity of personality disorders (19-23), such as the study of Prevalence of personality disorder in alcohol and drug services and associated co morbidity, which Bowden-Jones et al. studied on a sample group of 64 patients, using interviews and the Quick Assessment Schedule (PAS-Q) and found the frequency of co morbidity personality disorders at 53% in the alcoholic sample (20). This corresponds with study of Fernandez-Montalvo et al. who studied Personality disorders in alcoholics by comparing the results from the International Personality Disorders Examination (IPDE) and The Millon Clinical Multiaxial Inventory- II (MCMI-II), consisting of 50 Spanish alcoholics, and a control of 55, which found that

the frequency of co morbidity personality disorders among alcoholics was 52% and the in the control population is 18% (21). Similarly, the study of Echeburua et al. studied the co morbidity of alcoholics and personality disorders, which is a comparative study, with a sample of 158 alcoholics and a control of 120 other patients with mental problems but is not a drug addicts and 103 people from the general population. The tool used in the evaluation is the IPDE and the MCMI-II, and found that 44% Alcohol dependents, 21% of people with mental problems and 6% of the general population have at least one co morbidity disorder (23). There are numerous other research that specify the exact personality disorders that is found among alcoholics such as the study of the conditions that express personality disorders, the motive for drinking, the use and consequence of alcohol consumption by Tragesser et al. using a study composed of 3,156 students from the Missouri – Columbia University who are at risk of Alcohol use disorder, which found that the sample group displayed a high rate of co morbidity between cluster B personality disorders and Alcohol use disorder (19). This corresponds with the study of Nordholm and Nielsen who studied Personality disorders in 363 Danish alcoholics receiving outpatient services, using interviews and found that the sample group who had Alcohol use disorders had Personality Disorders in clusters B and C (27). Additionally, there are also studies of Co morbid Mental Disorders Among the Patients with Alcohol Abuse and Dependence in Korea by Cho et al. using a sample of 5,176 Koreans, and found patients with Alcohol use disorder also displayed other mental co morbidity problems such as Depression, Simple phobia, Antisocial personality disorder and Gambling addiction (25). This corresponds with the study of Miranda et al. which explains the antisocial and psychopathic influences in the decision to use alcohol, using a sample group of 22 male alcoholics patients with no co morbidity, 17 alcoholics with Antisocial personality disorder, and 21 people from the general population and found that the decision to use alcohol is correlated with Antisocial personality disorder (26). Likewise, the study of the Epidemiology of co morbidity in addiction psychiatry of Miller and Fine in the Epidemiological Catchments Area Study project, which is large scale study in the United States which has been conducted continuously, to see the proportion of the co morbidity in alcoholism and drug addiction in the general population. One of the findings was that 14.6% of men and 10.1% of women had

Antisocial personality disorder (28). The work of Johnson and Ait-Daoud stated that individuals with Antisocial personality disorder often develop to alcoholics and have problems with drinking later on (30). The study of Mulder which studied alcoholics and personality, which is a review study of the literature using computer databases and found that antisocial and hyperactivity behavior is highly related to alcoholism (32). Although numerous research have concluded in the same direction that the common Personality disorder among alcohol addicts is Antisocial personality disorder (23, 25-26, 28-32), there are also research that have found differences, such as the study of Sher and Trull who studied Substance use disorder and personality disorder and found that 48% of alcoholic patients had Borderline personality disorder (83). The study of Hasin et al. of the frequency, correlation, incompetence, and co morbidity of patients with abnormal alcohol use according of the DSM-IV in the United States which is the result of the National Epidemiologic Survey on Alcohol and Related Conditions, using a sample of 43,093 using interviews, which found that Alcohol dependents is related to Personality disorders in Axis II, namely Histrionic and Antisocial personality disorder (84). Additionally, the study of Echeburua et al. which studied alcoholics and Personality disorders, an investigative study of a sample of 30 outpatient alcoholic dependents compared to the control of 30 patients with mental problems but have are not drug addicts, and a group of 31 samples from the general populations, using the International Personality Disorder Examination (IPDE) and The Millon Clinical Multiaxial Inventory – II (MCMI-II) as the assessment tools and found that 13.3% had Dependent personality disorder, followed by Paranoid personality disorder and Obsessive-compulsive personality disorder, each with 10% (22). This also includes the study of Fernandez-Moltalvo et al, who studied the Personality disorders of alcoholics comparing the results from the International Personality Disorders Examination (IPDE) and the Millon Clinical Multiaxial Inventory – II (MCMI-II), using a sample group of 50 Spanish alcoholic patients and a control of 55 people from the general public and found that 10% of the disorders found in the Personality disorders in the IPDE is Avoidance personality disorder. However from the evaluation of the MCMI-II most Personality disorders found was Dependence personality disorder at 16% (21)

In the case of Thailand, it was found in the study of Assanangkornchai S et al. on the Pattern of Drinking in Thai Men using a sample group of 91 Alcohol dependents, 77 Hazardous or Harmful drinkers, and 144 abstainers or light drinkers using structured interviews, which found Antisocial personality disorder being the most common Personality disorders amongst alcoholics (62). This corresponds with the study of Psychiatric Co-morbidity of Alcohol Dependence Patients Admitting in Chiang Mai Drug Dependence Treatment Center of Phajuy A and Sriburapar N which found that 1 in 5 psychiatric disorders most often found among alcoholics is the lifetime Antisocial personality disorder, 7.5% (85). This also includes the study of Personality Disorders of Persons with Alcohol Induced Psychiatric Disorders Admitted to Suanprung Psychiatric Hospital by Kammayorm J with the sample group consisting of 127 Alcohol induced psychosis using the PDQ-4: Personality Diagnostic Questionnaires-4, which found that 88.98% of people with Alcohol induced psychosis had Personality disorders, with 65.35% diagnosed with Obsessive-compulsive, 65.35% with Avoidance and 58.27% with Schizoid (86). Additionally, there are similar studies such as the Personality Disorders of Persons with Amphetamine Induced Psychotic Disorders Admitted to Suanprung Psychiatric Hospital by Phongrattnasawat K with a sample group 159 individuals using the PDQ - 4: Personality Diagnostic Questionnaire - 4, which found that 72.33% of individuals with amphetamine induced psychotic disorders had Personality disorders, 13.51% with Obsessive-compulsive, followed by 12.48% with Paranoid, and 11.30% with Avoidance, 8.22% with Schizoid, 6.9% with Dependence and 6.46% with Borderline personality disorder (38).

2.2 Mood Disorders

Mood disorders are where the individual is most prominently affected with emotional abnormality, including excessive fun or happiness or sadness, which is separated into two large groups namely, 1. Depressive disorders which include only one facet in terms of sadness, separated into Major depressive disorder and Dysthymic disorder, which is characterized by depression, boredom or loss of interest in various activities, loss of appetite, weight loss, insomnia, sloth, fatigue, loss of concentration

and though, worthlessness, suicidal ideation, but dysthymic disorder being less severe that major depressive disorder. 2. Bipolar disorders include abnormalities in both emotional facets separated into Bipolar I disorder and Cycothymic disorder, with the main characteristics being excessive fun, activity or annoyance, as well as feeling narcissism having increased self-esteem, talkative, quick to though, easily distracted, loss of sleep, excessive activity, and often obsessive over pleasurable experiences to detriment, group together as mania which occur in intervals with Depressive disorder (47, 49, 56).

2.3 Anxiety Disorders

Anxiety disorders is characterized by the patient having anxiety about situations, incidences or various activities to an excess, to the extent that it cannot be explained by stress toward a stimuli which is severe, and the anxiety remains despite the removal of the stimuli affecting the daily life and responsibilities which occurs along with automatic neurological conditions such as shaking hands and bodies, intestinal pains, chest pains or heart illness, whereby Anxiety disorders is separated into 1. Panic disorder and Agoraphobia which have Panic attack such as hear flutters, loss of breath, hyperventilation which occurs quickly in 10 minutes, and is repeated despite the lack of stimulus causing a feeling of anxiety about those conditions occurring again, inevitably affecting their daily lives. Some have agoraphobia is the fear of being in places or situations that offer no escape or help as well as 2. Phobia, which are characterized by excessive unreasonable fear and attempt to avoid or run away from the stimuli, which is separated into specific phobia and social phobia 3. Posttraumatic Stress Disorder or PTSD is characterized by the patient going through a traumatic experience that threatened their lives which causes extreme fear after the situation has already passed, avoiding situations or things relating to this situation at all times, and are highly alert, such as being easily startled, anxiety, insomnia. 4. Generalized Anxiety Disorder is characterized by excessive anxiety with various situations or activities, feeling they are unable to control the anxiety, which is also somatic such as antsy, annoyance, fatigue, muscle stiffening (47, 49, 56).

Studies of Co Morbidity with Alcohol Use Disorders in Axis I

From the literature, it was found that the most common co morbidity with Alcohol use disorder in Axis I are Mood disorders such as Major depressive disorder and Bipolar I disorder (8-15), Anxiety disorders such as Generalized Anxiety Disorder, Posttraumatic Stress Disorder (PTSD), Phobia (8-12, 16-17), Drug abuse (8, 18) such as the study of Lynskey which found that alcohol addiction and Mood disorders have a high rate of co morbidity (87). Likewise the study of Flensborg-Madsen et al. found that 50.3% of patients with Alcohol use disorders have psychiatric co morbidity, where the co morbidity found was 16.8% Mood disorders and 16.6% Drug abuse (8). This corresponds with study Kessler et al. found that alcoholics had psychotic co morbidity namely, Drug dependence (29.5% in males and 34.7% in females), Major depressive disorder (24.3% in males and 48.5% in females) (9). Similarly, the study of Schneider et al. found co morbidity in the alcoholics as Anxiety disorders (42.3%) separated into Generalized Anxiety Disorders (12.9%) Agoraphobia (13.1%) and Specific phobia (13.7), additionally, Affective disorders were also found (24.3%) (10). The study of Driessen et al. found co morbidity including Major depressive disorder and Anxiety disorders (86.7%) and Anxiety disorders alone (69.6%) (11). The study of Falk et al. found co morbidity in the form of Mood disorders and Anxiety disorders but was inconclusive as to what was the cause of the other (12). Similarly, the study of Manninen et al. found that heavy alcohol drinking is related to Depression (13), which corresponds with the study of Schade et al. which found co morbidity in terms of Generalized Anxiety Disorder (10.9%) and specific phobia (7.3%), Posttraumatic Stress Disorder (2.7%) (16). The study of Smith et al. found that 46.2% of those with Alcohol use disorder are diagnosed with Generalized Anxiety Disorder (17). The study of Schade et al. found that Alcohol use disorder and Anxiety disorders have a high rate of co morbidity makes diagnostics and treatment difficult (36). The study of Goldstein et al. found that Alcohol use disorder is often found in co morbidity with Bipolar I disorder (15, 88). Studies in Thailand by Phajuy A and Sriburapar N in the study Psychiatric Co-morbidity of Alcohol Dependence Patients Admitting in Chiang Mai Drug Dependence Treatment Center found lifetime manic episode (15.8%), current Major depressive disorders (15.0%) and current Generalized Anxiety Disorders (7.5%) (85).

3. The Millon Clinical Multiaxial Inventory-III (MCMI-III)

The Millon Clinical Multiaxial Inventory (MCMI) is a standard test which is common used in the assessment of personality (34, 39-42, 89), with over 650 research using the MCMI in their studies (34), used in the studies of numerous countries which are different and is translated into languages such as Spanish, Danish, Dutch, German, Italian, Chinese, Norwegian, Swedish and Thai (39, 89). The MCMI was created by Millon, an American researcher, based on Millon's bioevolutionary theory of personality development. The first editions were published in 1977 and have been revised two times over the last 20 years, with the latest edition being the MCMI-III which was published in 1994. The MCMI was developed at the same time as the DSM, whereby the scales have been developed to be easy for interpretation, using terminology from the DSM and has a high effectiveness in the assessment for clinical diagnostics, consists of 175 questions, choosing between true or false, using a short time compared to other similar tests, approximated 20-30 minutes. The profile characteristics corresponds with the Multiaxial Assessment of the DSM-IV which showed the 11 clinical personality patterns, and 3 severe personality pathology characteristics in the Axis II according to the Multiaxial Assessment system, as well as the 7 clinical syndrome and 3 severe clinical syndromes in Axis I. Additionally, there are questions that that serve as indicators as to the reliability of the answers in three areas, namely, Disclosure indices, Desirability indices, and Debasement indices where the names of the Clinical Personality Patterns and Clinical Syndromes in Axis I and II which is evaluated from the MCMI-III (21, 34, 37, 39-45), which can be can be separated as seen in the following tables.

Table 1 the Clinical Personality Patterns and Clinical Syndromes in the MCMI-III (39)

Clinical Personality Patterns	scales	Clinical Syndromes	scales
• Schizoid	1	• Anxiety	A
• Avoidant	2A	• Somatoform	H
• Depressive	2B	• Mania	N
• Dependent	3	• Dysthymia	D
• Histrionic	4	• Alcohol Dependence	B
• Narcissistic	5	• Drug Dependence	T
• Antisocial	6A	• PTSD	R
• Sadistic (Aggressive)	6B		
• Compulsive	7		
• Negativistic (Passive-Aggressive)	8A		
• Masochistic (Self-Defeating)	8B		
Sever Personality Pathology	**scales**	**Sever Clinical Syndromes**	**scales**
• Schizotypal	S	• Thought Disorder	SS
• Borderline	C	• Major Depression	CC
• Paranoid	P	• Delusional	PP

The Development of the MCMI (39, 89)

The beginnings of the MCMI go back to 1969 when Millon published the Modern Psychopathology, which is a theory about the development of personality assessment tools. In 1972, developed the Millon-Illinois Self-Report Inventory (MI-SRI) and in 1980 improved and developed the MI-SRI to correspond with personality assessment in the DSM-III and changed the name from MI-SRI to Millon Clinical Multiaxial Inventory (MCMI). In the process, Millon created questions from the Millon's theories, consist 175 questions that fit the criterion and then used to find a standard scale for psychiatric patients in order to find the cut-off point that indicates psychopathology. The MCMI uses the base rate score (BR) system by converting raw scores in order to interpret the score, whereby the BR score, which comes from the percentage of the population group that have specific traits or symptoms with at least a BR score of 85 or more which shows the clear symptoms of the psychopathology. The MCMI-III is considered the latest edition, was published and disseminated in 1994 to correspond with the changes to the DSM-IV which came out in the same year. The process of developing the MCMI-III used the same method as the MCMI and MCMI-II with the publishing of the MCMI-III temporary edition, by developing 325 questions which is used on a sample of 600 individuals to find the reliability value, then the internal consistency was found (Cronbach's alpha) and the Test-retest reliability (table 2), until finally the remaining questions that fit the qualities of the 175 questions, with changes to 90 of the questions from the MCMI-II (85 questions were retained from the MCMI-II). In the MCMI-III the scale was increased to include 2 new scales, namely the Depressive and PTSD scale, while still retaining Self-Defeating and Aggressive/Sadistic scale, even though the two scales have been cut out from the personality assessment of the DSM-IV. The MCMI-III has 24 clinical scales, and when included with the modifying indices, totals 28 scales. Another change in the MCMI-III is the scoring from 1, 2 and 3 point to 1 and 2 point, however in finding the cut-off point the BR remains in use, whereby the MCMI-III comes from a sample group of 1,079 psychiatric patients.

Table 2 shows the internal consistency (Cronbach's alpha) and Test-retest reliability of the MCMI-III (39)

MCMI-III Scales		number of Items	Internal consistency [a] (Cronbach's alpha)	Test-retest [b] Reliability
Clinical Personality Patterns				
1	Schizoid	16	.81	.89
2A	Avoidant	16	.89	.89
2B	Depressive	15	.89	.93
3	Dependent	16	.85	.89
4	Histrionic	17	.81	.91
5	Narcissistic	24	.67	.89
6A	Antisocial	17	.77	.93
6B	Sadistic (Aggressive)	20	.79	.88
7	Compulsive	17	.66	.92
8A	Negativistic (Passive-Aggressive)	16	.83	.89
8B	Masochistic (Self-Defeating)	15	.87	.91
Sever Personality Pathology				
S	Schizotypal	16	.85	.87
C	Borderline	16	.85	.93
P	Paranoid	17	.84	.85

Table 2 Shows the internal consistency (Cronbach's alpha) and Test-retest reliability of the MCMI-III (39) (continued)

MCMI-III Scales		number of Items	Internal consistency [a] (Cronbach's alpha)	Test-retest [b] Reliability
Clinical Syndromes				
A	Anxiety	14	.86	.84
H	Somatoform	12	.86	.96
N	Mania	13	.71	.93
D	Dysthymia	14	.88	.91
B	Alcohol Dependence	15	.82	.92
T	Drug Dependence	14	.83	.91
R	PTSD	16	.89	.94
Sever Clinical Syndromes				
SS	Thought Disorder	17	.87	.92
CC	Major Depression	17	.90	.95
PP	Delusional	13	.79	.86
Modifying Indices				
X	Disclosure	N/A	N/A	.94
Y	Desirability	21	.7657	.92
Z	Debasement	33	.9169	.82

[a]Cross-validation sample (N=398)

[b]Test-retest interval = 5 - 14 days (N=87)

Modifying Indices (Validity Scales) (39, 89)

The validity scale of the MCMI-III in 4 aspects

1) Validity Index (Scale V) consist of 3 questions, items 65, 110, and 157, which are absurd questions in order to randomly test if patients chose to answer "true" in the validity index in two more questions, which shows that the patient may not have answered the questions, raising questions.

2) Disclosure Index (Scale X) to test whether the report is open or closed or defensive calculated from the raw score of Scale X (disclosure) which if less than 34 shows that the patients is defensive by reporting of the psychopathology less than in reality, and if more than 178 indicates the patient was exaggerating, therefore if the score for Scale X is less than 34 and more than 178, they will be eliminated.

3) Desirability Index (Scale Y) to test the self-report that is defensive where a BR Score of 75 or more indicates the patients' defensiveness, exaggerating themselves in a more positive view, therefore if a patient has a BR score of 75 or more, caution should be given in the transcription.

4) Debasement Indices (Scale Z) to test the negative self-report using a BR Score 75 or more indicates low self-esteem showing mental health problems, affective problems, or have problems expressing a need for help.

Studies of Reliability and Validity of the MCMI-III

Groth-Marnat concluded a study on the reliability and validity of the MCMI-III as a tool with good constructed psychometrics, a rather constant internal consistency value, where the MCMI-III has an alpha coefficient value of .80 up to 20 scales from a total of 26 scales. The reliability value from the test-retest in the mid to high level (.82-.96) (89) with a mean value of .91 which indicates that the reliability of the MCMI-III is rather high (39). Separated into various personality scales and clinical scales, the value of personality scales should be higher because clinical scales are more difficult to change than the constantly changing psychosis according to the characteristics in the MCMI-III. The mean value of the clinical scales is .91 is higher than the mean value of personality scales of .89 which has continued to developed.

As for the study of the validity of the MCMI-III, Axis II it was found that the value of positive predictive power (PPP) has a high validity rate such as the dependent (81%), paranoid (79%), compulsive scales (79%) with some scales with low PPP values including masochistic (30%), negativistic scale (39%). As for the sensitivity (SENS) value, it is rather high, such as paranoid (92%), schizotypal scale (82%) and some SENS scales with low values such as negativistic (44%), dependent scale (52%). Those in Axis I has a PPP scale that is rather high such as drug dependence (93%), alcohol dependence (88%), dysthymia scale (81%), but some scales have low PPP such as delusional disorder (33%), somatoform scale (39%). The SENS value is rather high such as thought disorder (100%), PTSD (88%), major depression scale (84%) and some scales have SENS value that are rather low such as somatoform (24%), and delusional disorder scale (50%) (39). For this research, the researcher had permission from the NCS Pearson, Inc.

The Thai version of the MCMI-III

Srisukho Th and Phungpong S translated the MCMI-III into the Thai version, and conducted validity studies among 42 psychiatric patients, concerning reliability, internal consistency from Cronbach's alpha and found that most of the then had a value of .70 or more (Table 3). The validity of the assessment is high, assessing from the Pearson's Correlation between the scores of groups of conditions and symptoms of the patients from the test and the scores from specialist especially those in Axis I, and found that high correlation (0.88) as for Axis II it was found to have moderate correlation (0.61). Additionally, the scores from other conditions is statistically significantly correlated (b = .01) in terms of co morbid symptoms, which corresponds with the criteria in the psychiatric assessment of DSM-IV. From this research it can be concluded that the MCMI-III Thai edition is able to assess conditions and symptoms of Thai psychiatric patients (37).

Table 3 Shows the internal consistency (Cronbach's Alpha) of the MCMI-III scores Thai version. (37)

	MCMI-III Scales	number of Items	Alpha
Clinical Personality Patterns			
1	Schizoid	16	.6587
2A	Avoidant	16	.7708
2B	Depressive	15	.8302
3	Dependent	16	.6953
4	Histrionic	17	.7119
5	Narcissistic	24	.7478
6A	Antisocial	17	.7157
6B	Sadistic (Aggressive)	20	.6522
7	Compulsive	17	.5970
8A	Negativistic (Passive-Aggressive)	16	.7195
8B	Masochistic (Self-Defeating)	15	.7306
Sever Personality Pathology			
S	Schizotypal	16	.8032
C	Borderline	16	.7930
P	Paranoid	17	.7737
Clinical Syndromes			
A	Anxiety	14	.8513
H	Somatoform	12	.8128
N	Mania	13	.6971
D	Dysthymia	14	.8209
B	Alcohol Dependence	15	.6328
T	Drug Dependence	14	.6866
R	PTSD	16	.9066

Table 3 Shows the internal consistency (Cronbach's Alpha) of the MCMI-III scores Thai version. (37) (continued)

MCMI-III Scales		number of Items	Alpha
Sever Clinical Syndromes			
SS	Thought Disorder	17	.8438
CC	Major Depression	17	.8837
PP	Delusional	13	.7414
Modifying Indices			
X	Disclosure	N/A	N/A
Y	Desirability	21	.7657
Z	Debasement	33	.9169

4. Multiaxial Assessment

The Multiaxial Assessment is an assessment system from many dimensions of the DSM-IV, where the American Psychiatric Society increased the Multiaxial Assessment for the first time in the DSM-III in 1980 with the objective to support the clinical assessment that includes biopsychosocial (51), with 5 Axis assessments. In each dimension there will be comprehensive information, not just diagnostics, but to allows all assessors to evaluate the patient from many perspectives (47, 49).

Axis I Psychiatric disorders or condition

Axis II Personality disorders or intelligence

Axis III Pathology of the patient pertaining to Axis I or not

Axis IV Biopsychosocial environment

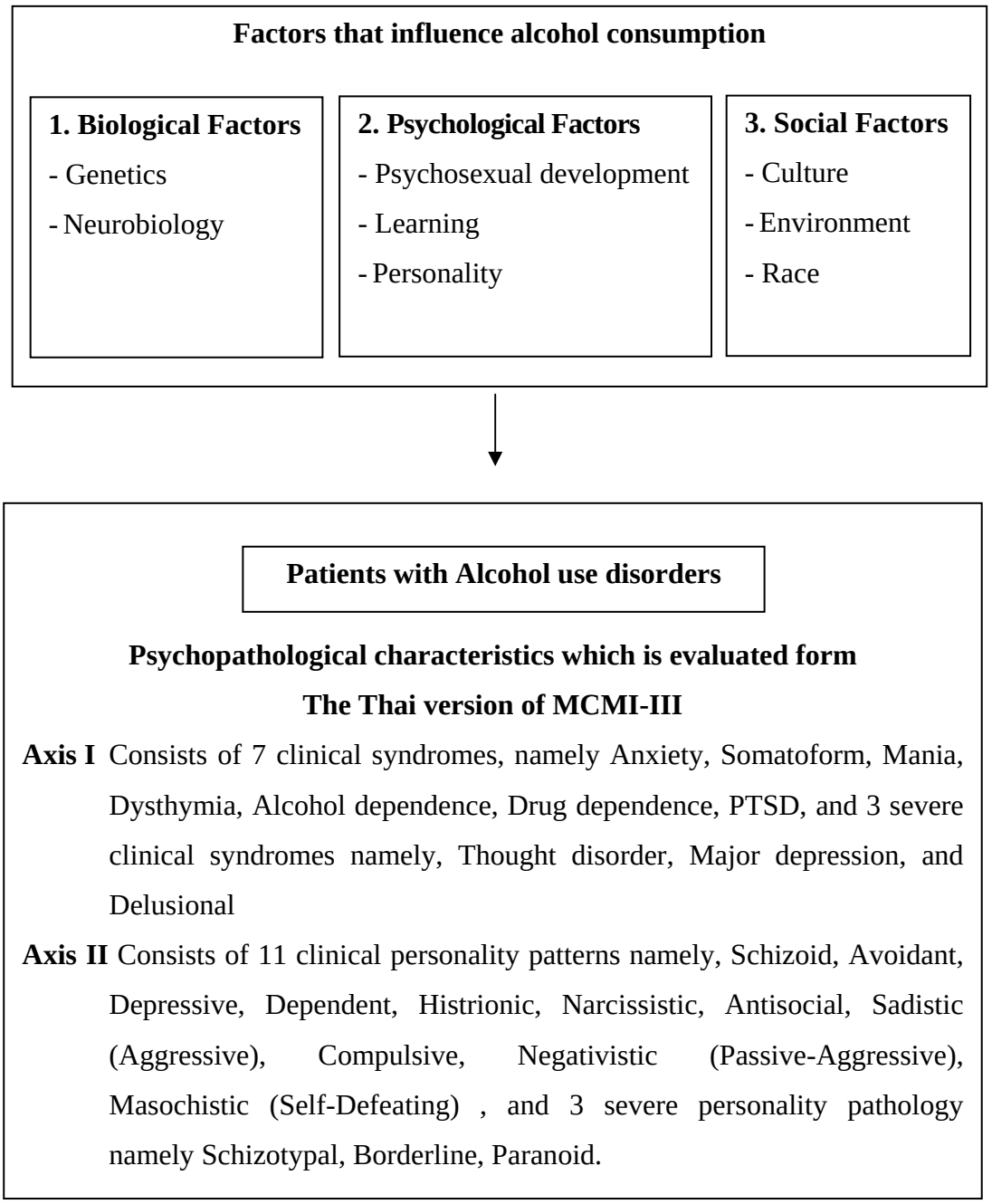
Axis V The assessment of efficiency or level ability in the adaptability of the patient using the Global Assessment of Functioning Scale (GAF)

This study is limited to Axis I and Axis II which is evaluated form the MCMI-III only.

Conceptual Framework

From the literature review it was found that there are numerous factors that are related to the Alcohol use disorders such as biology, psychology and sociology which causes psychopathology in individuals with Alcohol use disorders, whereby the psychopathology that is found exists in Axis I and II according to the Multiaxial Assessment system with the most common co morbid disorders with Alcohol use disorders in Axis I being Major depressive disorder, Bipolar I disorder (8-15), Anxiety disorders, Posttraumatic Stress Disorder (PTSD) (8-12, 16-17) and Personality disorders in Axis II being the most common (8, 19-23). Most foreign research points to the research question of “patients with Alcohol use disorders have what psychopathological characteristics and how is alcohol drinking behavior related to the psychopathology” which can be concluded as follows.

Research Conceptual Framework



CHAPTER III
METHODOLOGY

This is a descriptive research in order to study the psychopathological characteristics of patients with Alcohol use disorders and alcohol consumption behavior related to psychopathological characteristics using the following procedure.

Population and Sample Group

The populations in this study are patients diagnosed with Alcohol used disorders who receives treatment at the Suanprung Psychiatric Hospital, Chiang Mai

The sample group was calculated using the equations where the total population is known or approximated, but the proportion is unknown (90) which is the number patients with Alcohol use disorder, totaling 709 individuals (6) as follows.

$$n_{pm} = \frac{NZ^2}{4NE^2+Z^2}$$

When

n_{pm} is the size of the sample group in the approximation of P in the case that variance is highest (p=.05), with a reliability (1- α) where the approximation will not vary more than E

N is the total number of target population, in this study N = 709

Z is the value of the standard cure, where the area under the cure is α/2 where Z limits the center of the curve to be (1- α)

E is the size of the largest variance that the researcher can accept, in this study E = .05 Reliability is 95% Z=1.64

From the equation, the following calculations

$$n_{pm} = \frac{NZ^2}{4NE^2+Z^2}$$

$$= \frac{(709)\,(1.64)^2}{4(709)\,(.05)^2+(1.64)^2}$$

$$= 196 \approx 200$$

The number of samples calculated is 196, which is statistically sufficient and is increased to 200; therefore the sample size is 200

The sample group

The sample group was chosen through purposive sampling using the following inclusion criteria

1. Has been diagnosed with Alcohol use disorders (Alcohol abuse and Alcohol dependence), with F10.1 and F10.2 code according to the International Classification of Diseases and Related Health Problems, 10th revision ICD-10
2. 18 years of age and older
3. Able to read and write Thai
4. Is not intoxicated or suffering from Alcohol withdrawal symptoms
5. Has no psychosis
6. No severe depression
7. Able to control themselves, no aggression, hurting themselves or others
8. Is not in the process of electroconvulsive therapy
9. Volunteers and signs a form of consent to participate in the research

Test invalidity conditions according to the MCMI-III (28)

1. Did not specify sex
2. Is less than 18 years or did not specify age
3. More than 12 questions not answered
4. Answered "yes" in the validity scale for at least 2 questions
5. Raw scores for Scale X (disclosure) is less than 34 or more than 178
6. None of BR scores on clinical personality patterns scales are above 59

Research Instruments

There are 2 tools used in this study

Part 1 information about personal and alcohol consumption Questionnaire consisting of sex, age, marital status, level education, career, monthly income, age of first alcohol consumption, initial and present motivation, duration of drinking type of drink, volume of daily consumption, frequency, time of drinking, location of drink, mode of drinking, presence of family members who are alcoholics.

Part 2 the Millon Clinical Multiaxial Inventory – III (MCMI-III) Thai version which is created and developed by Millon, translated into Thai by Srisukho Th and Phungpong S consisting of 175 questions, which are short sentences, to investigate and self-report by choosing the true or false answer. Scoring the answers for each of the scale is clearly indicated as 1 or 2 points. The MCMI-III was created as a tool to help the assessment of psychopathology to include the psychosis according to the DSM-IV in Axis I and II for the Thai version. It has an internal consistency found using the Cronbach's Alpha and found that most was high at a rate of .70 or above (table 3) and compare its ability to distinguish the conditions by comparing the MCMI-III Thai version with the diagnosis of experts, and found that the score for the MCMI-III Thai version can explain the patient's conditions. When compared to the assessment of the experts, Axis I had a correlation = .88 and Axis II a correlation = .61 (37). For this research, the researcher had permission from the NCS Pearson, Inc.

Administration and Scoring (39)

The MCMI-III procedure takes two forms, namely the pencil and paper format and the computer format. For this research, the pencil and paper format was adopted, consisting of a set of questions, record form, pencil and eraser with the test administered in a quiet and private environment. The MCMI-III was developed for use with adults of 18 years or older who are literate, who are individuals with mental and psychotic problems and is not appropriate for use with the general population. The MCMI-III is self-report inventory where the patient report about themselves, and requires the patient's cooperation of the patient, therefore patients who suffer from severe anxiety, confusion, sedation, or drug intoxication are not suited for the MCMI-III.

Scoring each question has a clear 1 or 2 point scale, combining all the scores gives the raw score which can then be interpreted using the table of values in the MCMI-III using the BR score. Transcribing the score, a BR score of 85 or more shows abnormal characteristics, for 14 Personality disorders have a BR score of 85 or more indicating the presence of a disorder. For 10 clinical syndromes, a BR score of 85 or more shows the prominence of a syndrome.

Data Collection

1. The data collection was carried out by the research that has been trained, educated and experienced in the tests to administer the test individually.

2. The completeness of the data and bring the information to score according to the criteria in the manual in order to analyze the data in a statistical way.

Statistical analysis of the information

This research analyzed the data using the Statistic Package for Social Science (SPSS) computer program.

1. Use descriptive statistics; specify frequency, percentage, mean, standard deviation of the data collected from the personal interview and information about alcohol use.

2. The description of the psychopathological characteristic in patients who have Alcohol use disorders use descriptive to specify frequency, percentage, mean, and standard deviation.

3. Compare the difference between the psychopathological characteristic found in patients with Alcohol use disorders and alcohol consumption behavior using the t-test

CHAPTER IV
RESULTS

The study of the Psychopathological Characteristics of Patients with Alcohol Use Disorders, used a sample group consisting of patients diagnosed with Alcohol use disorders according to the Diagnostic and Statistical Manual Disorders, 4th edition (DSM-IV), using the disorder code of the International Classification of Diseases and Related Health Problems, 10th revision (ICD-10) of the World Health Organization, namely F10.1 (Alcohol abuse) and F10.2 (Alcohol dependence) because it is the code used to diagnose the 200 patients at the Suanprung Psychiatric Hospital. There are two parts of the tools in the study, namely 1) Personal profile and information about alcohol consumption, 2) the Millon Clinical Multiaxial Inventory-III (MCMI-III) Thai version. The research results are separated into three parts

Part 1 Personal profile and information about alcohol consumption

Part 2 Psychopathological characteristics of patients with Alcohol use disorders

Part 3 Comparison between alcohol consumption behavior and psychopathology

Part 1 Personal Profile and Information about Alcohol Consumption

Table 4 Personal Profiles

Personal characteristics	**N**	**%**
SEX	188	94.0
Male	12	6.0
Female		

Table 4 Personal Profile (Continued)

Personal characteristics	N	%
AGE (Years)		
18 – 21	1	0.5
22 – 40	106	53.0
41 – 60	93	46.5
Marital Status		
Single	63	31.5
Married	71	35.5
Divorced/Separated	59	29.5
Widowed	7	3.5
Level of Education		
Primary school	57	28.5
Secondary school	60	30.0
High School or vocation school	48	24.0
Diploma or vocation certificate	14	7.0
Bachelors	19	9.5
Masters	2	1.0
Occupation		
Unemployed	11	5.5
Laborers	78	39.0
Farmers	38	19.0
Personal business	37	18.5
Bureaucrat/state employee	30	15.0
Others	6	3.0

Table 4 Personal Profile (Continued)

Personal characteristics	N	%
Average Monthly Income (Baht)		
Less than 1,000	18	9.0
1,001 – 4,000	47	23.5
4,001 –8,000	70	35.0
8,001- 12,000	30	15.0
More than 12,000	35	17.5

From Table 4 , it was found that almost all the samples were male (94%), and half (53%) are in the employment age (between 22-40 years), the three groups also had similar marital status with 35.5% married, 31.5% single, 33% divorced/separated, level of education is also similar, with 30% secondary school, which is similar to primary school with 28.5%, but only 10% had a diploma or more, most holding being laborers (39%) with an average income of 4001 -8000 baht (35%).

From the population characteristic it is found that the sample group about 2/3 are in the middle socioeconomic status, with a rather low income (less than 8000 baht), this may because the study focuses on a state psychiatric institute which is accessible to the patient.

Table 5 Information about alcohol consumption (n = 200)

Information on alcohol consumption	N	%
Age of First Alcohol Consumption (years)		
Less than 13	8	4.0
13 – 21	134	67.0
22 – 40	58	29.0
Motivation for first consumption (More than one answer is possible)		
Peer Pressure	120	35.9
Trying	108	32.3
Socializing/Celebration	62	18.6
Stress relief	21	6.3
Could not remember	2	0.6
Others	21	6.3
Total time of Alcohol Consumption (years)		
Less than 5	14	7.0
5 – 9	26	13.0
10 – 14	36	18.0
15 – 19	20	10.0
More than 20	104	52.0

Table 5 Information about alcohol consumption (n = 200) (continued)

Information on alcohol consumption	N	%
Age of initial treatment due to alcohol (years)		
13 – 21	6	3.0
22 – 40	135	67.5
41 – 60	59	29.5
Present reason for drinking (more than one answer possible)		
Socializing	79	21.7
Stress relief/Relaxation	123	33.8
Habit	78	21.4
Physical problem such as shaking, inability to work	44	12.1
Others	40	11.0
Regular type of alcohol beverage (more than one answer possible)		
Rice wine	114	26.2
Medicinal moonshine	32	7.4
Local liqueur such as Krasea Sato	50	11.5
Local moonshine	67	15.4
Imported liqueur	27	6.2
Beer	59	13.6
Cocktails, Whiskey other liqueurs such as Maekong, Hongsethong, Saengsom,	79	18.2
Others	7	1.6

Table 5 Information about alcohol consumption (n = 200) (continued)

Information on alcohol consumption	N	%
When you have the opportunity, how many standard drinks do you have?		
1 - 2 Standard drinks	10	5.0
3 - 4 Standard drinks	38	19.0
5 – 6 Standard drinks	44	22.0
7 - 9 Standard drinks	44	22.0
More than10 Standard drinks	64	32.0
Frequency of alcohol consumption over past year		
Once a month or less	1	0.5
2-4 times a month	18	9.0
2-3 times a week	54	27.0
Everyday or almost everyday	127	63.5
Time of drinking		
Morning	2	1.0
Evening	137	68.5
Entire day	61	30.5
Location		
Home	74	37.0
Restaurant or venue of liqueur sales	93	46.5
Others	33	16.5

Table 5 Information about alcohol consumption (n = 200) (continued)

Information on alcohol consumption	N	%
Mode of drinking		
Alone	81	40.5
With a friend or close person	108	54.0
Other	11	5.5
Have you been able to stop drinking		
Yes	187	93.5
Never	13	6.5
Longest period of abstinence from alcohol consumption (n = 187)		
Less than a week	12	6.4
More than a week less than a month	27	14.4
More than 1 month less than 3 months	28	15.0
More than 3 months less than 6 months	41	21.9
More than 6 months less than 1 year	27	14.4
More than 1 year	52	27.8
Family or relative with alcohol dependence		
None	122	61.0
Yes	78	39.0

Table 5 showing information about alcohol consumption reveals that most of the sample group began drinking between 13-21 years of age (67%), the reason for first consumption being peer pressure (35.9%) and trying (32.3%), driven by inner impulses (38.6%) and external influences (54.5%). Most have drunk alcohol for more than 20 years (52%) which is a long time and is certain to affect Alcohol use disorders. The sample group came to the hospital for treatment due to alcohol use between the ages of 22 – 40 years (67%). The present reason for drinking in the present is for stress relief or relaxation (33.8%), socialization (21.7%), and out of habit (21.4%). It can be seen that the reason behind initial drinking is most external, but present drinking is usual internally stimulated. The types of alcohol consumed is rice wine (26.2%), with more than 10 standard drinks (32%), making most consumption patter (76%) in the zone of Hazardous drinking which means that the person has drunk more than 5 standard drinks which is a quantity that can cause Alcohol use disorders. The frequency of drinking in one year being everyday or almost every day is as high as 63% which indicates Alcohol dependence because they are unable to control their drinking or to stop or display signs of withdrawal symptoms. Most drink alcohol in the evening (68.5%), however about 1/3 could drink all day. About half (46.5%) drink in a restaurant or venue with alcohol, but is not that much different from those who drink at home, making venue unimportant. The mode of drinking is usually with close friends or those close to them (54%), which is not too different from drinking along. Most (93.5%) have quit drinking before. The time of abstaining from alcohol is closely proportioned, with longer than 1 year (27.8%), more than 3 months but less than 6 months (21.9%), and most have no relatives with Alcohol dependence (61%).

Table 6 Summary of important findings in the personal information and information about alcohol consumption

Personal characteristics and information about alcohol consumption	N	%
The sample is almost all male	188	94.0
About half are working age (22-40 years)	106	53.0
Three equally proportioned marital status		
Married	71	35.5
Divorced/Separated	66	33.0
Single	63	31.5
Two equally proportioned level of education		
Mostly secondary school	60	30.0
Primary school	57	28.5
Most are hired laborers	78	39.0
Most are in the lower social economic status		
(income 8,000 baht or less)	135	67.5
Most began drinking before the ages of 21	142	71.0
The reason for first drinking is usually external		
Peer pressure and socialization	182	54.5
Most have drunk alcohol for over 10 years	160	80
Hospital treatment for Alcohol use disorder between		
ages of 22-40 years	135	67.5
Present reason for drinking usually internal		
To relive stress/relax/habit/reduce withdrawal	245	67.3
Preferred drinks are mostly cheap		
Rice wine, local brew, moonshine etc.	263	60.5
Most carry out hazardous drinking, specifically		
More than 5 standard drinks	152	76.0
The frequency of alcohol consumption over 1 years		
Everyday or almost every day	127	63.5

Table 6 Summary of important findings in the personal information and information about alcohol consumption (continued)

Personal characteristics and information about alcohol consumption	N	%
Time of drinking		
In the evening or after work	137	68.5
About one third drinks all day	61	30.5
Venue of drinking		
Restaurant or venue of alcohol sale	93	46.5
At home	74	37.0
Most drink with close friends	108	54.0
Almost all can stop drinking	187	93.5
The longest period of alcohol abstinence		
More than 1 year	52	27.8
More than 3 months but less than 6 months	41	21.9
Most do not have relatives with Alcohol use disorder	122	61.0

Part 2 Psychopathological Characteristics of patients with Alcohol use disorders

Psychopathological Characteristics of patients with Alcohol use disorders in this research is diagnosed using the MCMI-III Thai version, using the BR score value of 85 or above as an inclusion criteria, namely for the 14 Personality disorders scale, BR 85 indicated the presence of a disorder. For 10 Clinical syndromes, BR 85 indicated prominence of syndromes which is not related to the diagnosis and coding of disorders according to the ICD-10 in the medical record.

Table 7 Psychopathological Characteristics of patients with Alcohol use disorders (n=200)

MCMI-III Scales	N	%
Clinical personality patterns (Axis II)		
Schizoid	14	7.0
Avoidant	6	3.0
Depressive	26	13.0
Dependent	48	24.0
Histrionic	0	0.0
Narcissistic	0	0.0
Antisocial	10	5.0
Sadistic (Aggressive)	2	1.0
Compulsive	0	0.0
Negativistic (Passive-Aggressive)	33	16.5
Masochistic (Self-defeating)	7	3.5
Severe personality pathology		
Schizotypal	2	1.0
Borderline	11	5.5
Paranoid	10	5.0

Table 7 Psychopathological Characteristics of patients with Alcohol use disorders (continued)

MCMI-III Scales	N	%
Clinical Syndromes (Axis I)		
Anxiety	126	63.0
Somatoform	11	5.5
Mania	4	2.0
Dysthymia	24	12.0
Alcohol Dependence	124	62.0
Drug Dependence	6	3.0
PTSD	18	9.0
Sever Clinical Syndromes		
Thought Disorder	4	2.0
Major Depression	12	6.0
Delusional	7	3.5

From table 7 showing the Psychopathological Characteristics of patients with Alcohol use disorders, where in the area Personality disorders compose about half (53.5%) of repressive personalities, lacking confidence in their decisions, which found Dependence (24.0%), followed by Negativistic (Passive-Aggressive) (16.5%), and lastly Depressive (13.0%).

In the part of clinical syndromes, most suffer from the anxiety and affective, most being Anxiety (63.0%), followed by Alcohol dependence (62.0%) and lastly Dysthymia (12.0%). Additionally, PTSD (9.0%) and Major depression (6.0%) in similar proportions.

Table 8 Number and percentage of patients with Alcohol use disorders with and without co morbid Psychiatric disorders (n = 200)

Sample Group	N	%
Co morbid Psychiatric disorders found	167	83.5
No co morbid Psychiatric disorders found	33	16.5

From table 8 it can be seen that most patients with Alcohol use disorders (83.5%) had co morbid Psychiatric disorders

Table 9 Personality disorders of patients with Alcohol use disorders (n = 200)

Personality	N	%
Personality disorders found	111	55.5
No Personality disorders found	89	44.5

From table 9 it is found that there are a similar proportion of Alcohol use disorders patients with and without personality disorders (55.5% and 44.5%)

Table 10 Clinical syndromes found in Alcohol use disorders (n = 200)

Clinical syndrome	N	%
Clinical syndromes found	161	80.5
No clinical syndromes found	39	19.5

Table 10 found that most of Alcohol use disorders patients (80.5%) had clinical syndromes.

Part 3 Comparison of the differences in alcohol consumption behavior and Psychopathological Characteristics of patients with Alcohol use disorders

The researcher reorganized the alcohol consumption behavior information from the survey as follows. Items1. The age of first consumption of less than 13 and 13-21 years is joined together into the less that 21 years group because the 13 years or less group had a n<30 can causes statistical inaccuracies. Items3. The time of alcohol consumption is compressed into two new groups by combining the less than 5 years (n<30) with the 5-9 years (n<30) into a new group of 1-9 years and combining the 10-14 years with the 15-19 years group and the 20 years and above group into the 10 years or more group. Items7. The volume of drinking is put into 2 new groups namely group's 1-4 standard drinks and 5 or more standard drinks because 5 standard drinks or more is used as the inclusion criteria for hazardous drinking. Lastly items 8. The frequency of alcohol consumption over the past year is reorganized into two new groups namely, combining the groups once a month with the less than 2-4 times a month and the 2-3 times a month into a new group of less than 4 times a week, retaining the group that drinks every day or almost every day because drinking at least 2 times a week puts a person at risk of alcohol addiction (3).

Psychopathological characteristics in this study refer to Personality disorders and Clinical syndromes diagnosed by the MCMI-III Thai version (above BR 85) which is not related to the diagnosis and coding according to the ICD-10 in the medical record.

Table 11 Comparing the mean values between the Psychopathological Characteristics of samples group and the age of first consumption

MCMI-III Scales	Less than 21 years (n = 142)		22-40 years (n = 58)		t-test	P – value
	M	SD	M	SD		
Clinical personality patterns						
Schizoid	.09	.29	.02	.13	2.495	.013
Avoidant	.04	.20	.00	.00	2.494	.014
Depressive	.13	.33	.14	.35	-.212	.832
Dependent	.26	.44	.19	.39	1.112	.268
Histrionic	.00	.00	.00	.00	-	-
Narcissistic	.00	.00	.00	.00	-	-
Antisocial	.06	.23	.03	.18	.641	.522
Sadistic (Aggressive)	.01	.12	.00	.00	.906	.366
Compulsive	.00	.00	.00	.00	-	-
Negativistic (Passive-Aggressive)	.17	.38	.16	.36	.238	.812
Masochistic (Self-defeating)	.02	.14	.07	.26	-1.341	.184
Severe personality pathology						
Schizotypal	.01	.08	.02	.13	-.655	.513
Borderline	.03	.17	.12	.33	-2.040	.045
Paranoid	.04	.20	.07	.26	-.784	.434

Table 11 Comparing the mean values between the Psychopathological characteristics of samples group and the age of first consumption (continued)

MCMI-III Scales	Less than 21 years (n = 142)		22-40 years (n = 58)		t-test	P - value
	M	SD	M	SD		
Clinical Syndromes						
Anxiety	.67	.47	.53	.50	1.746	.084
Somatoform	.06	.23	.05	.22	.129	.897
Mania	.01	.12	.03	.18	-.932	.352
Dysthymia	.13	.33	.10	.31	.458	.647
Alcohol Dependence	.69	.46	.45	.50	3.161	.002
Drug Dependence	.02	.14	.05	.22	-1.149	.338
PTSD	.09	.29	.09	.28	.119	.905
Sever Clinical Syndromes						
Thought Disorder	.03	.17	.00	.00	2.022	.045
Major Depression	.05	.22	.09	.28	-.891	.375
Delusional	.02	.14	.07	.26	-1.341	.184

From table 11 it can be seen that the sample group with different age of first consumption groups have different psychopathological characteristics that are significantly different at .05 as follows, in the Personality disorders group namely Schizoid, Avoidant, and Borderline, for Clinical syndromes namely Alcohol Dependence and Thought Disorder more than starting to drink between 22-40 except Borderline, where the 22-40 years group have psychopathological characteristics more than the group that began drinking before 21 years. There are no other psychopathological characteristics with a statistical significance of .05.

Table 12 Comparing the mean values between Psychopathological characteristics of sample groups with the quantity of alcohol consumption

MCMI-III Scales	1 – 4 standard drinks (n = 48)		5 or more standard drinks (n = 152)		t-test	P - value
	M	SD	M	SD		
Clinical personality patterns						
Schizoid	.04	.20	.08	.27	-.88	.380
Avoidant	.02	.14	.03	.18	-.425	.671
Depressive	.10	.31	.14	.35	-.608	.544
Dependent	.25	.44	.24	.43	.185	.853
Histrionic	.00	.00	.00	.00	-	-
Narcissistic	.00	.00	.00	.00	-	-
Antisocial	.02	.14	.06	.28	-1.354	.178
Sadistic (Aggressive)	.00	.00	.01	.11	-.796	.427
Compulsive	.00	.00	.00	.00	-	-
Negativistic (Passive-Aggressive)	.06	.24	.20	.40	-2.815	.006
Masochistic (Self-defeating)	.00	.00	.05	.21	-2.700	.008
Severe personality pathology						
Schizotypal	.02	.14	.01	.08	.863	.389
Borderline	.04	.20	.06	.24	-.463	.644
Paranoid	.04	.20	.05	.22	-.302	.763

Table 12 Comparing the mean values between Psychopathological characteristics of sample groups with the quantity of alcohol consumption (continued)

MCMI-III Scales	1 – 4 standard drinks (n = 48)		5 or more standard drinks (n = 152)		t-test	P - value
	M	SD	M	SD		
Clinical Syndromes						
Anxiety	.63	.49	.63	.48	-.082	.935
Somatoform	.00	.00	.07	.26	-3.432	.001
Mania	.02	.14	.02	.14	.047	.963
Dysthymia	.06	.24	.14	.35	-1.677	.096
Alcohol Dependence	.48	.50	.66	.47	-2.249	.027
Drug Dependence	.00	.00	.04	.19	-2.491	.014
PTSD	.06	.24	.10	.30	-.761	.448
Sever Clinical Syndromes						
Thought Disorder	.00	.00	.03	.16	-2.020	.045
Major Depression	.00	.00	.08	.27	-3.598	.000
Delusional	.04	.20	.03	.18	.287	.774

From table 12 it is found that the sample group with different quantities of alcohol have different psychopathological characteristics with a statistical significance of .05 in the groups of Personality disorders, namely negativistic (passive-aggressive), Masochistic (Self-defeating) and Clinical syndromes namely Somatoform, Alcohol Dependence, Drug Dependence, Thought Disorder and Major Depression, whereby the sample group with more than 5 standard drinks displayed more psychopathological characteristics than those with 1-4 standard drinks. There is no statistical significance at .05 for other psychopathological characteristics.

Table 13 Comparison of the mean values of Psychopathological characteristics of samples group with the total time of alcohol consumption

MCMI-III Scales	1 - 9 years (n = 40)		More than 10 years (n = 160)		t-test	P - value
	M	SD	M	SD		
Clinical personality patterns						
Schizoid	.05	.22	.08	.26	-.552	.582
Avoidant	.05	.22	.03	.16	.826	.410
Depressive	.05	.22	.15	.36	-2.225	.028
Dependent	.25	.44	.24	.43	.165	.869
Histrionic	.00	.00	.00	.00	-	-
Narcissistic	.00	.00	.00	.00	-	-
Antisocial	.05	.22	.05	.22	.000	1.000
Sadistic (Aggressive)	.00	.00	.01	.11	-.708	.480
Compulsive	.00	.00	.00	.00	-	-
Negativistic (Passive-Aggressive)	.18	.38	.16	.37	.190	.850
Masochistic (Self-defeating)	.03	.16	.04	.19	-.383	.720
Severe personality pathology						
Schizotypal	.00	.00	.01	.11	-.708	.480
Borderline	.08	.27	.05	.22	.618	.537
Paranoid	.03	.16	.06	.23	-.808	.420

Table 13 Comparison of the mean values of Psychopathological characteristics of samples group with the total time of alcohol consumption (continued)

MCMI-III Scales	1 - 9 years (n = 40)		More than 10 years (n = 160)		t-test	P - value
	M	SD	M	SD		
Clinical Syndromes						
Anxiety	.55	.50	.65	.48	-1.170	.243
Somatoform	.05	.22	.06	.23	-.154	.878
Mania	.00	.00	.03	.16	-2.019	.045
Dysthymia	.10	.30	.13	.33	-.433	.665
Alcohol Dependence	.48	.51	.66	.48	-2.051	.045
Drug Dependence	.03	.16	.03	.17	-.206	.837
PTSD	.08	.27	.09	.29	-.369	.713
Sever Clinical Syndromes						
Thought Disorder	.00	.00	.03	.16	-2.019	.045
Major Depression	.05	.22	.06	.24	-.296	.767
Delusional	.03	.16	.04	.19	-.383	.702

From table 13 it is found that different total time of alcohol consumption have different psychopathological characteristics at a statistical significance of .05 namely Depressive Personality disorders and Clinical syndromes including Mania, Alcohol Dependence, Thought Disorder, whereby the group with 10 years or more alcohol use had more psychopathological characteristics than those with 1-9 years. No other psychopathological characteristics were found to have a statistical significance of .05

Table 14 Comparison of the mean values of psychopathological characteristics of sample groups and the frequency of alcohol consumption in the past year

MCMI-III Scales	Less than 4 times a week (n = 73)		Everyday of almost every day (n = 127)		t-test	P - value
	M	SD	M	SD		
Clinical personality patterns						
Schizoid	.05	.23	.08	.27	-.636	.525
Avoidant	.04	20	.02	.15	.695	.488
Depressive	.07	.25	.17	.37	-2.176	.031
Dependent	.16	.37	.28	.45	-2.007	.046
Histrionic	.00	.00	.00	.00	-	-
Narcissistic	.00	.00	.00	.00	-	-
Antisocial	.03	.16	.06	.24	-1.229	.220
Sadistic (Aggressive)	.00	.00	.02	.12	-1.420	.158
Compulsive	.00	.00	.00	.00	-	-
Negativistic (Passive-Aggressive)	.14	.35	.18	.39	-.806	.421
Masochistic (Self-defeating)	.00	.00	.06	.23	-2.711	.008
Severe personality pathology						
Schizotypal	.01	.12	.01	.09	.397	.692
Borderline	.05	.23	.06	.23	-.010	.992
Paranoid	.07	.25	.04	.19	.907	.365

Table 14 Comparison of the mean values of psychopathological characteristics of sample groups and the frequency of alcohol consumption in the past year (continued)

MCMI-III Scales	Less than 4 times a week (n = 73)		Everyday of almost every day (n = 127)		t-test	P - value
	M	SD	M	SD		
Clinical Syndromes						
Anxiety	.51	.50	.70	.46	-2.706	.008
Somatoform	.03	.16	.07	.26	-1.455	.147
Mania	.00	.00	.03	.17	-2.024	.045
Dysthymia	.10	.30	.13	.34	-.793	.429
Alcohol Dependence	.38	.49	.76	.43	-5.403	.000
Drug Dependence	.03	.16	.03	.17	-.163	.871
PTSD	.05	.23	.11	.31	-1.433	.154
Sever Clinical Syndromes						
Thought Disorder	.00	.00	.03	.17	-2.024	.045
Major Depression	.03	.16	.08	.27	-1.669	.097
Delusional	.05	.23	.02	.15	1.038	.302

From table 14 it was found that the different frequencies of alcohol consumption over the past year had different psychopathological characteristics with a statistical significance of .05 namely Personality disorders specifically Depressive, Dependent, Masochistic (Self-defeating) and Clinical syndromes specifically Anxiety, Mania, Alcohol Dependence, Thought Disorder, whereby the group that drank everyday or almost every day will have more psychopathological characteristics than those that drank less than 4 times a week. There are no other psychopathological characteristics with a statistical significance of .05

Table 15 Summary of alcohol consumption behavior and psychopathological characteristics

MCMI-III Scales	Alcohol consumption behavior							
	age of first consumption		Quantity of consumption		Total time of consumption		Frequency of alcohol consumption in past year	
	t-test	p-value	t-test	p-value	t-test	p-value	t-test	p-value
Personality Disorders								
Schizoid	2.495*	.013	-.88 NS	.380	-.552 NS	.582	-.636 NS	.525
Avoidant	2.494*	.014	-.425 NS	.671	.826 NS	.410	.695 NS	.488
Depressive	-.212 NS	.832	-.608 NS	.544	-2.225*	.028	-2.176*	.031
Dependent	1.112 NS	.268	.185 NS	.853	.165 NS	.869	-2.007*	.046
Antisocial	.641 NS	.522	-1.354 NS	.178	.000 NS	1.000	-1.229 NS	.220
Sadistic	.906 NS	.366	-.796 NS	.427	-.708 NS	.480	-1.420 NS	.158
Negativistic	.238 NS	.812	-2.815*	.006	.190 NS	.850	-.806 NS	.421
Masochistic	-1.341 NS	.184	-2.700*	.008	-.383 NS	.720	-2.711*	.008
Schizotypal	-.655 NS	.513	.863 NS	.389	-.708 NS	.480	.397 NS	.692
Borderline	-2.040*	.045	-.463 NS	.644	.618 NS	.537	-.010 NS	.992
Paranoid	-.784 NS	.434	-.302 NS	.763	-.808 NS	.420	.907 NS	.365
Clinical Syndromes								
Anxiety	1.746 NS	.084	-.082 NS	.935	-1.170 NS	.243	-2.706*	.008
Somatoform	.129 NS	.897	-3.432*	.001	-.154 NS	.878	-1.455 NS	.147
Mania	-.932 NS	.352	.047 NS	.963	-2.019*	.045	-2.024 *	.045
Dysthymia	.458 NS	.647	-1.677 NS	.096	-.433 NS	.665	-.793 NS	.429
Alcohol	3.161*	.002	-2.249*	.027	-2.051*	.045	-5.403 *	.000
Drug	-1.149 NS	.338	-2.491*	.014	-.206 NS	.837	-.163 NS	.871
PTSD	.119 NS	.905	-.761 NS	.448	-.369 NS	.713	-1.433 NS	.154
Thought - Disorder	2.022*	.045	-2.020*	.045	-2.019*	.045	-2.024*	.045
MDD	-.891 NS	.375	-3.598*	.000	-.296 NS	.767	-1.669 NS	.097
Delusional	-1.341 NS	.184	.287 NS	.774	-.383 NS	.702	1.038 NS	.302

(Note: NS = no significant, * = p < .05)

From table 15 it can be seen that the sample group that started drinking in different age groups have Personality disorders specifically, Schizoid, Avoidant, Borderline, and Clinical syndromes specifically Alcohol dependence, Thought Disorder are different with a statistical significance of .05.

The sample group with different quantities of drinking have Personality disorders specifically Negativistic (Passive-Aggressive), Masochistic (Self-Defeating) and Clinical syndromes namely Somatoform, Alcohol Dependence, Drug Dependence, Thought Disorder and Major Depression have a statistical significance at .05.

The sample group with different total alcohol consumption times have Personality disorders in the Depressive and Clinical syndromes specifically Mania, Alcohol Dependence, Thought Disorders that are different with a statistical significance of .05.

The sample group with different frequencies of alcohol consumption in the past year have Personality disorder in the Depressive, Dependent, Masochistic (Self-Defeating) and Clinical syndromes specifically Anxiety, Mania, Alcohol Dependence, Thought Disorders with a statistical significance of .05.

CHAPTER V
DISCUSSION AND CONCLUSION

This descriptive study had the objective of studying the Psychopathological characteristics of patients with Alcohol use disorders and the relationship between alcohol consumption behavior and the psychopathology of patients with Alcohol use disorders using tools in two parts namely 1) interview of personal information and alcohol consumption 2) the Millon Clinical Multiaxial Inventory-III, Thai version. The sample group in the study are patients diagnosed with Alcohol use disorders according to the Diagnostic and Statistical Manual Disorders, 4th edition (DSM-IV) but the study retains the coding system of the International Classification of Diseases and Related Health Problems, 10th revision (ICD-10) of the World Health Organization, namely F10.1 and F10.2 who are receiving treatment at Suanprung Psychiatric Hospital, totaling 200 persons. Data collection with the sample group, descriptive statistical data analysis and comparison of the psychopathological characteristics and alcohol consumption behavior used the t-test.

Discussion

This study will discuss the results in four areas as follows

1. Personal information and information about alcohol consumption behaviors and the difference between alcohol consumption behaviors and psychopathological characteristics (Table 6)

Almost all the sample (94%) is male, corresponding with numerous studies such as the study of Glanz et al. which found that males consume more alcohol than females (76). Xiang et al. found that males are statistically significantly correlated with alcohol-related disorders (69). Swendsen et al. found that males had more risk

factors for Alcohol dependence (91). Nadsasarn A found that most patient of Alcohol dependence relapse (98.9%) are male (7). Hanna and Grant found that males had more Alcohol used disorders than females (65%:35%) (92). This corresponds with the national census in 2006 which found that males drank about 6 times more than females (2) and the study of Sinlapakit P et al. found that individuals with alcohol levels at dependency levels of 5 males to: 1 female, which may be due to female perception that receiving treatment for alcohol dependence is shun upon by society, perceiving is as a social stigma and therefore avoid treatment (5). The role of woman, especially in Thai society, expected to be ladies, their manners and composed expression within the rules of society, and alcohol consumption to the point of dependency is contrary to social mores. Conversely, males are given freedom and social acceptance more than women such as the image of men holding alcohol being seen as socialization, where women drinking are seen as inappropriate. Additionally, there are genetic factors are important in alcohol dependency in males more so than in females. More than half of the sample group (53%) are working age (between 22-40 years) which corresponds with the national census in 2006 which found that the group with the most drinking (34.4%) the age group of 25-40 years had the highest onset of Alcohol dependence, which the first signs of Alcohol-related problems first occurring between 16-22 years, which may be a result of drinking at 13-15 years (31). Working age has considerable freedom to live life because they are considered adults, with jobs and an income of their own, with no one to control their behavior, making them free to drink. The marital status of three groups included married (35.5%), single (31.5%) and divorced/separated (33%) which can cause stress and anxiety due to unemployment, problems with personal relationships, or familial relationships and find an emotional release through alcohol becoming alcohol dependence. This corresponds with the study of Sinlapakit P et al. found that the sample group had a mean age of 38.9 years and found that 51.2% of Alcohol dependent suffered from high to severe levels of stress (5). The sample group mostly had secondary school level (30%), which was similar to the group with primary school level, and only about 10% had a diploma or more, whereby Day and Homish concluded that low education was an indicator of heavy drinking (29). This corresponds with the study of Glanz et al. which found that alcohol consumption is reduced with higher education (76), whereby higher education

is prevents or reduces the risk of alcohol use (54). This can be explained by the simple fact that people with higher education learn of the harms of alcohol and are aware of the effects of excessive drinking. People with higher education are often given the opportunity to receive stable job opportunities which may induce them to keep up an image in order to uphold professional respectability and therefore more likely to control themselves. Another possibility is that people with higher education may not want to receive treatment for Alcohol dependence at a psychiatric hospital fearing social stigma which might affect their career excepting in certain cases such as being sent for treatment or having extensive conditions that a general hospital is unable to handle their treatment. Most of the sample group holds daily laborer jobs (39%) such as construction, farmers, with an average income of 4,001 – 8,000 baht (35%). This group of people is at risk of alcohol dependency due to the northern Thai culture where superiors often treat their subordinates with alcohol in the evening after work as a repayment in addition to their payment, and after initially drinking they often invite each other to drink even more in restaurants or liquor shacks. In rural communities of Chiang Mai, there are often liquor stores in every village which is often sold with barbeque snacks and fruits often attracting clients in the evening after work, some using these shops as a rendezvous point to and socialize (71). This is the common situation in most northern communities and may eventually develop into patients with Alcohol use disorders. In terms of information pertain to alcohol consumption it was found that most of the sample group began drinking alcohol between 13-21 years (67%), the reason for first drinking is due to peer pressure (35.9%) and trying (32.3%). Considering the results of the research it can be concluded that this is the result of internal influences 38.6% and 54.5% from external forces, most of who have been drinking for over 20 years (52%). Prolonged drinking induces Alcohol use disorders. The sample group first received treatment in between the age of 22-40 years of age (67%), with the present reason for drinking being stress relief and relaxation (33.8%) followed by socialization (21.7%) and drinking out of habit (21.4%) in similar proportions. It can be seen the reason for initial drinking is usually an external influence, but present causes are usual internal. The type of alcohol chosen is rice wine (32%), with 76% carrying out hazardous drinking, drinking more than 5 standard drinks which causes Alcohol use disorders. The frequency of drinking over the past

years is almost everyday or almost every day (63%) which shows the stat of alcohol dependence because they are unable to control their drinking or unable to stop drinking or upon abstinence causes withdrawal symptoms, therefore requires them to drink to reduce withdrawal. The time often drinking is in the evening (68.5%) but about 1/3 drinks about the whole day mostly at restaurants or liquor stores (46.5%) which is similar to those who drink at home, therefore the venue of consumption is not an important factor. The mode of drinking was often with those who are close or friends (54%). Most have been able to abstain from drinking (93.5%) where most specify that they were able to do so because they were receiving treatment, requiring medication, work, and going into Buddhist Lent. Patients receiving treatment for 2-4 weeks greatly increases the chances of prolonging abstinence, where it is predicted that about 60% are able to abstain from drinking for a year or more (31). As for the longest period of Alcohol dependence is more than 1 years (27.8%) before coming back to drink because Alcohol dependence is a chronic condition and despite treatment and therapy, often have relapse with even greater quantities of alcohol (29, 30). This is due to the nature alcohol dependents, they will a cycle of drinking and abstinence and drinking again in what is referred to as the stage of change model by Prochaska & Di Clemente which states that the stages of change has six stages that ultimately repeats itself in a cycle as follows stage 1. Pre contemplation 2. Contemplation 3. Determination or Preparation 4. Action 5. Maintenance and 6. Relapse (93). This corresponds with the Principle of Effective Treatment of the National Institute on Drug Abuse (NIDA) which has one statement that “drug use during treatment must be monitored continuously, as lapses during treatment do occur” that can be a powerful incentive for patients and can help them withstand urges to use drugs (94). Additionally, the environments such as venue, people or emotional state, especially negative responses to drinking are all stimuli that push the patient into relapse (93). This corresponds with the study of Wigun S which found that society and the environment are factors that induce relapse of Alcohol Induced Psychotic Disorder (95). This includes the study of Kamkan J which found that cultural contexts, alcohol are part of the way of life of rural community beliefs and traditions (72). The study of Nadsasarn A found that the cause of relapse into alcoholism is alcohol craving, lack of motivation and having a venue of liquor sales in the community (7). This factor is

unavoidable, making it difficult for the sample group who must still maintain relationships with the community and the environment and therefore must suffer relapse. Most of the samples do not have family or relatives who are alcoholic dependents (61%). The information about alcohol consumption is rather important because it is necessary which qualitative data that is necessary to understand the reason of drinking.

Moreover there are findings that were found during the experiment that drinking alcohol increases the rate of cognitive degradation as a result of the quantity and prolong time where patients with higher education are finding that their ability to read is not sufficient when compared to their education and profession, some taking a long time to compete the survey (usually taking 45 minutes). Lastly the motivation in doing testing is important because there is a total of 175 questions, which may seem a lot to some patients so their motivation and intention must be analyzed prior to beginning the test.

As for alcohol consuming behavior namely initiation age, time of consumption, quantity of consumption and frequency of consumption over the past year it was found that these were related to the psychopathological characteristics of patients with Alcohol use disorders such that different alcohol consuming behaviors indicate different psychopathological characteristics, whereby the sample group that began drinking before 21 years of age will have Personality disorders and Clinical syndromes that are statistically significantly different at .05 including Schizoid, Avoidant, Alcohol Dependence, Thought Disorder, more than groups that began drinking between 22-40 years excepting Borderline, where the 22-40 years old group had more Borderline than those starting before the age of 21 (Table 11). The findings in this research corresponds with numerous research that found that those who start drinking at an early age will lead to chronic drinking and is an indicator of the change from alcohol use to Alcohol dependence (91, 96). The age where most Alcohol dependents begin drinking is usually from a very small age, as seen in the study of Hanna and Grant who found men who were diagnosed with Alcohol use disorders began a an early age (mean = 17.1 years) (92). The study of the 2000 National Household Survey on Drug Abuse reports that the mean age of drinking between 12-20 years is 14 years (30). This also include the study of Nadsasarn A who found that

most alcohol dependents begin drinking between the age of 10-19 years (57.8%)(7) corresponding with the study of Tam et al. who found that alcohol dependents who began drinking before 18 years of age are at risk of alcohol dependency (97) and the study of Wang and El-Guebaly who found that drinking from an early age (12-24) is positively correlated with Alcohol dependence, Major depressive episodes and co morbid disorders (98). Schuckit concluded that the clinical reason for Alcohol dependence was the age of initiation between the ages of 13-15 years (31), whereby for the sample group the reason for initiation was external influences (54,5%) more than internal influences (38.6%) because this age range is considered to be adolescence with their inquisitive mind, preferring to experiment with new things and who are often influenced by their friends, desiring the acceptance of their friends, making it easy to invite friends to drink together, making friends an influential factor on the dependence of Alcohol dependence, with characteristics such as being Alcohol dependent and wooing friends to do the same, challenging each other to use alcohol or being best friends (42). This corresponds with the study of Schoor et al. who reported that being in cliques and groups of friends play a role in the development of Alcohol dependence (67).

The sample group that had more than 5 standard drinks had Personality disorders and Clinical syndromes specifically Negativistic (Passive-Aggressive), Masochistic (Self-defeating), Somatoform, Alcohol Dependence, Drug Dependence, Thought Disorder and Major Depression more than those with 1-4 standard drinks with a statistical significance of .05 (Table 12). The quantity of drink influences the psychopathology which corresponds with the criteria of the diagnosis of Alcohol dependence, which is drinking or desiring to drink in such large quantities as to be unable to control or stop it (49, 50). Medically patients who drink are put into groups in four groups, namely 1) Low risk drinking, 2) Hazardous drinking, 3) Harmful use, 4) Alcohol dependence, whereby the result of their drinking is considered and determining the size of standard drink, with the hazardous drinking group will have more than 4 standard drinks per day for women and 5 standard drinks for men (3). This study found that most of the sample group who had more than 5 standard drinks a day had more psychopathology than those who had 1-4 standard drinks a day, which corresponds with the study of Hingson et al. who found that Alcohol dependents who

drank more than 5 standard drinks a day (96) which is the same with the study of Phajuy and Sriburapar which found that most alcohol dependents (83.4%) had more than 6 standard drinks a day (85) and the study of Nadsasarn A who found that most alcohol dependents (57.8%) had more than 24 standards drinks a day (7). Drinking more than 29 standard drinks a week doubles the risk of developing psychosis (30). Heavy drinking or drinking in large quantities also causes depression (99). Additionally, there is the study of Teerachue P which found that Alcohol dependents are unable to control or stop drinking and must depend on programs to reduce their drinking behavior (100).

The time of drinking that is different also have different Personality disorders and Clinical syndromes namely the Depressive, Mania, Alcohol Dependence and Thought Disorders with a statistical difference of .05. The sample group had more than 10 years drinking alcohol and had more of these condition that those with 1-9 years (Table 13). As for the time of drinking, it may be correlated to the drinking from a young age, because the younger the age the longer the drinking for their life. Conversely, beginning drinking at a later age reduced the change of lifetime Alcohol dependence (30). The findings of this research show that drinking for more than 10 years causes Alcohol dependence and from the literature review it was found that between 25-40 years is the age group with the highest onset of Alcohol dependence. The alcohol-related problem for the first time between the ages 16-22 years may be the result of drinking for the first time between 13-15 years of age (31). Prolonged drinking will affect the progression of Alcohol use disorders because it shows signs of alcohol dependence. This corresponds with the study of Netkam E who found that most chronic drug abuser (85%) drank for more than 10 years had chronic depression and have negativism (101). The study of Kongkeaw U found that most Alcohol dependents in clinical institutions (67.71%) drank for more than 10 years and had severe depression (27.08%) (102). The total time of drinking is the accumulated time according to the patient which may include some off time and heavy drinking. The next time may have to indicate heavy drinking in order to have more detailed information.

The different frequency of drinking over the past year have Personality disorders and Clinical syndromes namely the Depressive, Dependent, Masochistic

(Self-defeating), Anxiety, Mania, Alcohol Dependence, Thought Disorder that are different with a statistical significance of .05. The sample group that drinks everyday or almost every day has more characteristics than those who drink less than 4 times a week (table 4). Most of the sample group (63.5%) drink almost everyday or almost every day indicating alcohol dependence because they are unable to control or stop drinking, and may possibly develop withdrawal symptoms, and therefore drink to reduce those symptoms, creating an ongoing cycle. This corresponds with the study of Nadsasarn A which found that more alcohol dependents (84.4%) drink every day (7). This also includes the study of Phajuy A and Sriburapar N that found that most Alcohol dependents (68.3%) drink everyday (85) and the study of Barros et al. which found that 22.3% of the population suffer from Alcohol use disorder and drink more than 4 times a week, and drinking in that quantity is related to psychosis (103). Additionally, psychopathological characteristics are Personality disorders, namely the Depressive, Dependent, Masochistic (Self-defeating) and Clinical symptoms Anxiety, Mania, Alcohol Dependent, Thought disorder which are characteristics of someone who is shy, lacking confidence to decide, pessimistic, and have high anxiety, corresponding with the study of Netkam E who found that people with chronic Alcohol dependence have negativism (101), all symptoms promote Alcohol dependence such as socialization, boosting confidence, courage, or drinking to reduce anxiety and depression.

2. Co morbid Psychiatric Disorders in patients with Alcohol Use Disorders

The results found that patients with Alcohol use disorders have co morbidity psychiatric disorders as high as 83.5%. This high number corresponds with numerous researchers such as Flensborg-Maden et al who found that patients with Alcohol use disorders totaling 50.3% had Psychiatric disorders (8). Schneider et al. conducted a study on the co morbid Anxiety and Affective disorders in Alcohol-dependent patients seeking treatment, the first multi center study in Germany, where the sample group was Alcohol dependent patience totaling 556 patients, and found that 53.1% of the sample displayed co morbidity in axis I (10). Similarly the study of in Thailand of Phajuy A and Sriburapar N on the Psychiatric Co-morbidity of Alcohol

Dependence Patients Admitting in Chiang Mai Drug Dependence Treatment Center and found that the sample group of Alcohol dependents had 60% psychiatric co morbidity (85). The study of Personality Disorders of Persons with Alcohol Induced Psychotic Disorders Admitted to Suanprung Psychiatric Hospital by Kammayorm J on the sample group of people with Alcohol induced psychotic disorders totaling 127 patients using the Personality Diagnostic Questionnaires 4 (PDQ-4), the results found that people with Alcohol-induce psychotic disorders totaling 88.89% had Personality disorders (86). In this study the number of psychotic disorders is rather high because 1) the tools used are different such as the use of the self report inventory or structure interview, and can be seen that research that use self report inventory there is often more disorders than in a structure interview (21, 22, 23) such as the study of Ferna´ndez-Montalvo et al who studied Personality disorders in alcoholics: A comparative pilot study between the IPDE and the MCMI-II. For the International Personality Disorders Examination (IPDE) is a semi structured interview and the Millon Clinical Multiaxial Inventory- II (MCMI-II) is a self report inventory and found that the frequency of Personality disorders in Alcohol dependent is 22% when evaluated with the IPDE and 52% when evaluated with the MCMI-II (21). This research uses the MCMI-III Thai version is a self report inventory (39) consisting mostly of question that the respondent replied with “yes” (43) because they report that it was true to their lives at the moment, 2) the sample group in the study studying patients and the general population (8,22) such as in the study of Echeburu´a et al. Comorbidity of Alcohol dependence and Personality disorders: A comparative study, whereby the Alcohol dependents us outpatients totaling 158 persons compared with 120 who clinical patients affected by mental disorders other than addictions and psychosis and 103 normal subject from general population the tool used to evaluate is the IPDE and the MCMI-II and found that Alcohol dependent, 44.3%, and of the general clinical sample, 21.7% (vs. 6.8% of the normative sample) showed at least one Personality disorder (23). If a study is conducted on Alcohol dependents the number of psychotic disorders will be higher than in normal populations 3) the mental health setting such as out and inpatients (22), whereby inpatients were more likely to have more psychotic co morbidity due to the severe nature of their conditions. 4) the type of Alcohol use disorders is Alcohol abuse or Alcohol dependence (25), if the diagnosis

is Alcohol dependence the severity is greater due to the patients tolerance and withdrawal symptoms (50). Most of the samples in this study had Alcohol dependence 5) Alcohol dependents often have negativism (101) seeing themselves in a negative way, as well as their history of multiple relapse resulting in low self-esteem resulting in a rather high score. 6) Drinking behavior is the prolonged time of alcohol consumption, drinking from an early age, and high frequency and quantity (table 5) which are factors that result in high psychosis.

3. Psychopathological characteristics of patients with Alcohol use disorder in Axis II

When separating the psychotic co morbidity into axis according to the Multiaxial assessment, the research found that in Axis II patients with Alcohol use disorder has 55.5% Personality disorders. There research results are similar to numerous other studies such as Prevalence of personality disorder in alcohol and drug services and associated co morbidity of Bowden-Jones et al. which studied a sample of 64 patients using the The Quick Personality Assessment Schedule (PAS-Q) and found that the frequency of Personality disorders in Alcohol dependents was 53% (20). The study of Ferna'ndez-Montalvo et al. studied Personality disorders in alcoholics using the Millon Clinical Multiaxial Inventory-II (MCMI-II) and found that the frequency of Personality disorders in alcoholics was 52% and the general population is only 18% (21). The study of Echeburu'a et al studied the co morbidity of Alcohol dependence and Personality disorders: a comparative study. Using a sample group of 158 alcoholics compared with 120 controls who are clinical patients affected by mental disorders other than addictions and psychosis and clinical patients affected by mental disorders other than addictions and psychosis using the IPDE and MCMI-II and found that Alcohol dependent, 44.3%, and of the general clinical sample, 21.7% (vs. 6.8% of the normative sample) showed at least one Personality disorders (23).

The psychopathological characteristics of Alcohol use disorders in terms of Personality disorders can be separated into Dependents (24.0%), followed by Negativistic (Passive-Aggressive) (16.5%) and Depressive (13.0%) which is similar to the study of Echeburu'a et al. studying alcoholism and Personality disorders: An

exploratory study with 30 Alcohol dependent patients attending an outpatient clinic compared to 30 psychiatric patients with non-addictive disorders and 31 people from the general population using the International Personality Disorders Examination (IPDE) and The Millon Clinical Multiaxial Inventory- II (MCMI- II). It was found that the most common was Dependent personality disorder (13.3%), followed by Paranoid personality disorder and Obsessive-compulsive personality disorder (10% each) (22). This also includes the study. The study of Ferna'ndez-Montalvo et al. studying Personality disorders in alcoholics: A comparative pilot study between the IPDE and the MCMI-II using 50 Spanish Alcohol dependents and 55 people from the general population as a control found that the frequency of Personality disorders using the MCMI-II found Dependence personality disorder 16% (21). This is different from the Thai study by Assanangkornchai S et al., who studied the pattern of drinking in Thai men, using 91 alcohol dependent samples, 77 hazardous and harmful drinkers, and 144 abstainer or light drinkers, using structured interview and found that the most common Personality disorders is Antisocial personality disorder in Alcohol dependents (62). The study of Psychiatric Co-morbidity of Alcohol Dependence Patients Admitting in Chiang Mai Drug Dependence Treatment Center by Phajuy A and Sriburapar N using the Mini international neuropsychiatric structure interview: M.I.N.I - Thai Version 5.0.0 to study 120 patients with Alcohol dependents and found that the most common Personality disorder was lifetime Antisocial personality disorder (7.5%) (85).The study of Personality Disorders of Persons with Alcohol Induced Psychotic Disorders Admitted to Suanprung Psychiatric Hospital by Kammayorm J using 127 persons with alcohol induced psychotic disorders, using the PDQ-4: Personality Diagnostic Ouestionnaires-4 and most commonly found Obsessive compulsive personality disorder (63.35%), Avoidance personality disorder (65.35%) and Schizotypal personality disorder (58.27%) (86). This corresponds with the observation of the therapy institute who state that alcoholics often come for treatment often have bad adaptation and are unable to cope with disappointment or stress, and must depend on other and feel worthless (5).

This study found that Dependent personality disorder is the most common (24.0%), followed by Negativistic (Passive-Aggressive) (16.5%), which corresponds with the study of Craig which found the most common Personality disorders in

Alcohol dependents are Avoidant, Dependent, and Negativistic (43). It can be explained that dependent abnormal personalities need others, have difficulty making decisions, lacking confidence or ability to make decision fro themselves. Additionally, they have problems expressing themselves to others especially to the one they are dependent on (49, 56, 61). These characteristics can induce Alcohol dependence because the patient finds it difficult to turn down requests from others to drink because they fear they might not be accepted and must depend on alcohol to socialize with other. This also includes the difficultly of deciding to stop to drink because they are uncertain of their own capabilities. As for Negativistic (Passive-Aggressive), which is second in common to dependence in this research, can be explained as the culture and upbringing of Thais to be soft spoken, humble, respectful, listen to adults, respect traditions, causes them to be unable to express themselves and are rather repressed to the point of emotional conflict, desiring to express themselves cognitively, emotionally, and behaviorally, but are unable to do so because of social mores making them passive-aggressive, unable to express anger straightforwardly, but portrays an air of silence or acceptance conflicting with their inner selves. According to the Freud, passive-aggressiveness is a mode of expression or expression of lack of friendliness but is controlled and modified to fit with social contexts and reality (104). The Personality disorders found in this study is contrary to most previous studies which report of Antisocial personality disorder as the most common disorder in patients with Alcohol use disorders, which can be explained by the tools used in the study (8, 21, 22, 23), the severity of the disorder, as well as Thai culture which is rather repressed in terms of the expression of aggression, resulting in less findings of antisocial behavior, as well as the fact that the sample group is composed of Alcohol dependents where alcohol is a legal substance, different from Substance use disorders who use drugs that are illegal and find Antisocial personality disorder more commonly. This is evident in the study of Craig who found that cocaine and heroin addicts had antisocial personality disorder in as much as 60% of addicts (33). The study of Skodol et al. found that antisocial personality disorder is correlated to Substance use disorders more than Alcohol use disorders (65) whereby Alcohol dependence with antisocial personality disorder will also more likely used other substances more than those without Antisocial personality disorder (83). In this

research, the number of antisocial personality disorder was 5%, which is similar to the study of Phajuy A and Sriburapar N which found 7.5% lifetime antisocial personality disorder (85). Additionally, another finding in this research is the lack of other Personality disorders such as Histrionic, Narcissistic and Compulsive, corresponding with the study of So who studied Substance abuse and psychiatric co morbid: Millon Clinical Multiaxial Inventory – III profiles of Chinese substance abusers not found Histrionic and Compulsive personality disorder (42) conflicts with the study of Kammayorm J which studied the sample group of 127 Alcohol Induced Psychotic Disorders using the PDQ-4: Personality Diagnostic Ouestionnaires-4 and found that Obsessive compulsive personality disorder (65.35%) (86). The reason for the difference may be due to the severity of the disorder and the tool used in this study the self report inventory as well, but the scoring as well as the theories behind the tests that are different. Nevertheless, scoring is based on BR Score of males in the scale compulsive of the MCMI-III has BR Score 83 which does not reach the inclusion criteria because the BR Score of 85 because the Scale Histrionic BR score is maxed at 84 and therefore there are no Personality disorders in terms of Histrionic and Compulsive. In this research the researcher tried to use BR Score 75 which shows the presence of a trait of personalities that are not yet abnormal at 3 scales and found only 1.5% Compulsive scale, and no Histrionic and Narcissistic scale. Another reason may be due to Thai culture where they are unable to express their desires, are humble and content with themselves.

4. Psychopathological characteristics of Alcohol use disorders in Axis I

The psychopathological characteristics of Alcohol use disorders in Axis I found that most (80.5%) had co morbid clinical syndromes. This study had a rather high number compared to other studies in a similar direction such as the study of Schneider et al, who studied Co morbid Anxiety and Affective disorder in Alcohol-dependent patients seeking treatment: the first multi centre study in Germany with 556 Alcohol dependents inpatients and found that the sample group displayed psychopathology in Axis I as high as 53.1% (10). The study of Flensborg-Madsen et al, found that 50.3% of patients with Alcohol use disorders had psychotic

co morbidity including 16.8% Mood disorders and 16.6% Drug abuse (8). This study found psychopathological characteristics of patients with Alcohol use disorders in the part of clinical syndromes according to Axis I, which when separated found condition groups such of Anxiety (63.0%) followed by Alcohol Dependence (62.0%), Dysthymia (12.0%), PTSD (9.0%) Major Depression (6.0%) Somatoform (5.5%) Delusional (3.5%) Drug dependence (3.0%) Mania (2.0%) and Thought Disorder (2.0%). This corresponds with the study of Driessen et al which found that psychotic co morbidity is Anxiety disorder (69.6%) (11). The study of Schade' et al, which found that psychotic co morbidity in the form Generalized Anxiety Disorder (10.9%), Posttraumatic Stress Disorder (PTSD) 2.7% (16). The study of Smith et al. found 46.2% of Alcohol use disorders patients were diagnosed with Generalized Anxiety Disorder (17). The study of Schade' et al. found that Alcohol use disorders and Anxiety disorders are the most common co morbid Psychiatric disorders, making prognosis difficult (36). The study of Schneider et al. found that psychotic co morbidity is Anxiety disorders (42.3%), and Affective disorders (24.3%) (10). The study of Falk et al. found that psychotic disorders are Anxiety disorders and Mood disorders (12). The study of Lynskey found that Alcohol dependence and Mood disorders often occur together in high rates (87). The study of Kessler et al found that people with Alcohol dependence have co morbid psychosis in the form of Major depressive disorder (24.3% in males and 48.5% in females) (9).

This study found Anxiety scale as high as 63% which may be due to the patients' self report of emotional problems that may be exaggerated as seen in the modifying indices of the MCMI-III which found the Scale Z: Debasement Indices 41.5% which may show the self-reporting that is exaggerated or desire for help. Additionally, the factor of withdrawal symptoms cannot be overlooked even though the sample group has an inclusion criteria in this research must not display withdrawal symptoms according to clinical guidelines of Suanprung Psychiatric Hospital, whereby Alcoholic dependent patients that receive emotional therapy must passed the withdrawal stage. Physical conditions of withdrawal symptoms such as shaking, sweating, confusion, agitation are easy to evaluate (3). However, psychological withdrawal symptoms is difficult to assess such as Anxiety is harder to assess than physical conditions especially when physical manifestation have ceased due to the

continual treatment, leaving only psychological withdrawal symptoms causing the instances of Anxiety, and should be evaluated with caution.

Clinical syndromes that are found in patients with Alcohol use disorders are mostly categorized under Anxiety disorders and Mood disorders. The occurrence of co morbidity of Alcohol and Psychiatric disorders has yet to be clearly concluded by anyone as to what is the cause, with four approaches that exist namely 1) Alcohol use disorders causes Disorders 2) Disorders causes the development of Alcohol use disorder 3) both Alcohol use disorder and Disorders is a result of common etiologic factors as well as genetics and the influence of the environment (8, 10) or mutual causes 4) there is no explanation as to what causes the co morbidity (12). The research of Flensborg-Madsen et al. found people diagnosed with Alcohol use disorders are at risk of developing psychiatric disorders such as Anxiety disorders, Mood disorders, Drug abuse and found that 43% of people with Alcohol use disorders have psychotic co morbidity and were diagnosed with Alcohol use disorders before being diagnosed with co morbidity and 56.9% are diagnosed with Alcohol used disorders before being diagnosed with Anxiety disorders (8). This corresponds with the study of Sinlapakit P et al. which found that the rate of alcohol addiction is correlated to stress and depression (5). Conversely, Anxiety disorders and Mood disorders may cause induce people to drink alcohol to the extent of Alcohol use disorders because people with Anxiety disorders or Mood disorders often use alcohol as an escape in order to relax and relief suffering through self-meditation that is caused by the disease or drinking alcohol to deal with problems, to deal with depression or relieve negative symptoms (5, 8, 10, 58, 105). According to the learning theory it can be explained that individuals with Anxiety disorders or Mood disorders is positively reinforced by drinking such as drinking induces happiness, increasing confidence in socialization, and therefore continues drinking (55) or negatively reinforced that is by removing the stimuli that causes distress such as tension reduction, reduction of negative affect, self-medication (55). This also includes the reduction of withdrawal symptoms (54) thus continuing to drink. Additionally, there is alcohol outcome expectancies such as drinking will increase free expression, removing shyness (55) allowing the individual to socialize and relive stress (58). Expecting the results of drinking before they actually drink may be learned from friends who have drank

before, commercials or experience from previous sessions (55). This corresponds with the study of Chaiyakird P found that alcohol outcome expectancies is an important factor that causes people who are alcohol dependent to drink alcohol whereby the sample group have alcohol outcome expectancies in terms of changing their perceptions as high as 83.80%, for stress relief 76.5%, dependence 42.13%, emotional change 30.09%, sexual stimulation 24.54%, and expression 22.69% (63).

As for Alcohol dependence, there were only 62% in the sample group of patients with Alcohol use disorders; therefore there should be more Alcohol dependents. This can be explained by the tool used in the study which is the self report inventory where the patient reports about themselves and thus require their cooperation to report truly without withholding information. The sample group is in treatment cause of alcohol consumption and is in the process of alcohol therapy, along with the some patients having passed withdrawal symptoms and has rather good conscious and awareness. The questions in the MCMI-III in the scale Alcohol Dependence are rather specific in terms of drinking and alcohol related problems making the sample group report in the Alcohol Dependence scale in a rather defensive manner or reporting less than in reality (89). Individuals who have Drug dependence are often able to avoid answering about drug use in the MCMI (43) because alcohol dependent patient are fearful that that they may be requested to stay in therapy longer, therefore the results of the self-report inventory especially pertaining to the alcohol use of Alcohol dependents which must be evaluated more holistically.

This study shows that the psychopathological characteristics of Alcohol use disorders found Personality disorders and Clinical syndromes that are co morbid psychiatric disorders in a rather high rate which may be an obstacle in the treatment of Alcohol use disorders or postpone the effects of treatment. For these reasons, importance should be given to the evaluation of the psychopathology and the co morbid Psychiatric disorders with Alcohol use disorders which will allow us to know and understand the psychopathology of Alcohol use disorders in order to develop therapies for patients with Alcohol use disorders to more appropriate and effective.

Conclusion

Part 1 Personal Information and Alcohol Consumption Behavior

Almost all the sample were male (94%), with about half being working age (22-40 years), with about equal proportion in for all three groups of marital status, namely married (35.5%), single (31.5%) and divorce/separated and widowed (33%). Level of education is mostly secondary school (30%), which is close to primary school (28.5%), most are day laborers (39%) and have an average income of 4001-8000 baht (35%).

In terms of information about alcohol consumption, it is found that most of the sample group began alcohol consumption between 13-21 years (67%). The reason for initial drinking is equally proportioned is peer pressure (35.9%) and trying (32.3%). Most have been drinking for over 20 years (52%) and first came to the hospital for treatment of alcohol related problems between 22-40 year of age (67%). The present reason for drinking is to relieve stress and relax; usually drinking rice wine (26.2%), at over 10 standard drinks a time (32%), most (76%) are Hazardous drinkers with more than 5 standard drinks in a quantity that can cause Alcohol use disorders (3). The frequency of drinking over the past year everyday or almost every day (63%), often drinking in the evening (68.5%), and drinking in restaurants or venues that retails alcohol (46.5%). The mode of drinking is usually with a friend or close person (54%), most (93.5%) have been able to stop drinking, most for more than 1 years (27.8%), most without other family members with relative with alcohol dependency (61%).

Part 2 Psychopathological characteristics of patients with Alcohol Use Disorders

Most (83.5%) have psychiatric co-morbidity separated into Axis and found that in Axis II 55.5% were Personality disorders, and there are three Personality disorders type, respectively Dependent (24.0%), Negativistic (Passive-Aggressive) (16.5%), and Depressive (13.0%) which are repressive personalities lacking confidence in their own decisions.

In Axis I; Clinical syndromes were found at 80.5% with three conditions respectively Anxiety (63.0%), Alcohol dependence (62.0%), Dysthymia (12.0%) which are in Anxiety disorders and Mood disorders group.

Part 3 Comparing the difference of alcohol consumption behavior and psychopathological characteristics

The sample group that began drinking before 21 years of age had Schizoid and Avoidant personality disorder and Alcohol Dependence and Thought Disorder more than group that began drinking between 22-40 years excepting Borderline where the 22-40 year group had more psychopathological characteristics than the younger than 21 year group with a statistical significance of .05.

The group that drink more than 5 standard drinks had Negativistic (Passive-Aggressive), Masochistic (Self-defeating) Personality disorders, and Somatoform, Alcohol Dependence, Drug Dependence, Thought Disorder and Major Depression more than the group with 1-4 standard drinks with a statistical significance of .05.

The sample group with more than 10 years of drinking had Depressive personality disorder and Mania, Alcohol Dependence, Thought Disorder more than the group with 1-9 years of drinking, with a statistical significance of .05.

The group that drank everyday or almost everyday had Depressive, Dependent, Masochistic (Self-Defeating) personality disorder and Anxiety, Mania, Alcohol Dependence, and Thought Disorders more than the group with less than 4 days a week with a statistical significance of .05.

Research Limitations

1. The tool used in the study of psychopathological characteristics is the MCMI-III Thai version which covers only 24 psychosis (Axis I 10 conditions, Axis II, 14 types) which does not cover the psychosis in the Diagnostic and Statistical Manual disorders, 4th edition (DSM-IV) and is the a self-report, and the evaluation should be more comprehensive view of the therapists and relatives.

2. The sample group in this study is patients with Alcohol use disorders who were receiving treatment at Suanprung psychiatric hospital which is a specific sampling and therefore may have sampling bias therefore resulting in severe instance of the disorder and may affect the results of the study compared to outpatient Alcohol use disorders. The inclusion criteria that emphasize Thai literacy excluded patients who do not meet this condition but may result in the psychopathological characteristics in this study no being representative of Alcohol use disorders. Additionally, most of the sample group lives in the northern region, and from the population characteristic it was found that the sample had a socioeconomic status and education that were in the middle level, and thus limit the representativeness of the study.

Recommendations

1. Information from this study can be used by therapist to decide a therapy approach that is appropriate to patients who have Alcohol use disorders looking at the personality and co morbidity, in order to increase the effectiveness of therapy as well as the development of new therapies for patients with Alcohol use disorders and co morbidity.

2. The therapy team should give importance to the evaluation of psychopathological characteristics and psychiatric co morbidity in patients with Alcohol use disorders to be more comprehensive to maximize the patient's benefits from the treatment.

3. There should be interviews with relatives in order to receive more information about the patient and get the patients' families involved in the therapy so that they can become aware and understand the basis of personality and psychosis that the patient is affected by, which will benefit the patients therapy in the long run when they return home.

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APPENDIX

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Siriraj Institutional Review Board

Certificate of Approval

COA no.Si 616/2009

Protocol Title : Psychopathological characteristics of patients with Alcohol use disorders

Protocol number : 550/2552(EC2)

Principal Investigator/Affiliation : Miss Witchuda Yasin / Department of Psychiatry
Faculty of Medicine Siriraj Hospital, Mahidol University

Research site : Faculty of Medicine Siriraj Hospital

Approval includes :

1. SIRB Submission Form
2. Proposal
3. Informed Consent Form
4. Questionnaire
5. Millon™ Clinical Multiaxial Inventory – III (MCMI-II)), Developed in 2005
6. Investigator's curriculum vitae

Approval date : December 11, 2009

Expired date : December 10, 2010

This is to certify that Siriraj Institutional Review Board is in full Compliance with International Guidelines For Human Research Protection such as the Declaration of Helsinki, the Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP).

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(Prof. Jariya Lertakyamanee, M.D.)
Chairperson

December 16, 2009
date

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(Clin. Prof. Teerawat Kulthanan, M.D.)
Dean of Faculty of Medicine Siriraj Hospital

December 18, 2009
date

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