

## **Drinking Behaviors and Health Problems among Enlisted Soldiers in Thailand<sup>1</sup>**

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### **Abstract**

Alcohol consumption among soldiers impairs health status, performance, and increases the risks of injuries and violence. This study examined drinking behaviors, health problems, and violence among enlisted soldiers at Adisorn military unit in Saraburi, Thailand. Data collection using self-reported questionnaires were distributed to 256 enlisted male soldiers in May 2017. Participants were age 20-22 (93%), Buddhists (98%), high school education or lower (93%). They purchased alcohol at their own expense (46.5%). For alcohol consumption, all were lifetime drinkers (100%). The current drinking patterns were different 28.5% were current drinkers, 65.5% are currently abstaining from drinking (64.5%), and 6.6% stopped drinking permanently. The top three alcohol beverages were beer (52.3%), brandy (25.0%), and hard liquor (19.5%). Problems related to alcohol were from lost balance/falls (6.7%), illness (10.2%), driving under the influence (19.5%), and accidents (24.2%). Violence from drinking in the past month was from fighting (28.1%). This study is the first to provide information about alcohol-related problems in enlisted male soldiers. There is the need to offer straightforward advice, brief counseling, and refer

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soldiers to receive treatment to prevent alcohol-related problems. Online social media and web-based programs were recommended as platforms to provide preventive alcohol message to the enlisted.

**Keywords.** alcohol, enlisted soldier, illness, injury

### **Background**

Alcohol consumption creates short- and long-term health problems in the general population (Jewpattanakul & Samai, 2014). The use of alcohol can negatively affect all aspects of a person's life, impact their family, friends and community, and place an enormous burden on society. It is a factor in 70% of auto accidents (Thai EMS Info, 2013; Online manager, 2013; Jung-in & Pinitsoontorn, 2017). Almost one in four crime incident reports indicated that the offender had been drinking alcohol before committing the crime (Greenfeld, 1998). That situation remains as National Council on Alcoholism and Drug Dependence (2015) reported that alcohol is a factor in 40% of all violent crimes today, and according to the Department of Justice, 37% of almost 2 million convicted offenders currently in jail, report that they were drinking at the time of their arrest.

Thailand ranked third in Asia for alcohol consumption and fifth worldwide with the average consumption for drinking distilled alcohol at 13.49 liters per person per year. Alcohol consumption reduces body performance and impairs decision-making. Alcohol abuse or continuous drinking creates adverse impacts on health, poor memory, nervous system problems, high blood pressure, hepatitis, cirrhosis, and gastric problems. A Thai national survey showed that alcohol consumption contributed to socio-economic problems. These include 5.7% of financial problems that resulting from family drinking, 6.7% of household expenses were spent on alcohol beverages, and 5.5% of work disruption, 3.2% of job loss, and 1.2% of poor quality of life could also be attributed to alcohol consumption (National Statistics Office, 2014). The Thai government set laws and regulation of alcohol, including a purchasing age which restricts children less than 20 years old from buying alcohol, time for selling alcoholic beverages, and advertisement on TV. It was found that many alcohol manufacturer companies violated the law on alcohol marketing and promotion in their advertisements (Manager Online, 2013).

The literature review indicated factors influencing alcohol-drinking behaviors were from the individual and environment. The individual factors include age, primary education, physical, mental, emotional, and willingness to stop drinking alcohol. The external factors include family environment, that is, alcohol consumption of parents

(Kaewjundra, 2011), and a community environment that influences alcohol use, such as alcohol advertisement, and marketing activities through music. Researchers found that high and moderate levels of exposure to alcohol media increased the risk of alcohol consumption (Thepnu, 2010). Perceptions of laws on alcohol affect alcohol consumption behaviors (Tasuwan, 2011). A survey in Bangkok revealed that after seeing anti-alcohol advertising, consumers were less likely to drink alcohol (Navamarat, 2009).

The military must protect the country; soldiers need to stay healthy, alert, and active. However, Daengthoen, Saengcharnchai, Yingwiwattanapong, and Pernparn (2012) indicated in their study about the problem of alcohol-dependent patients in the Psychiatric Ward at the Thai Army General (Phramongkutklao) Hospital for the treatment of alcohol withdrawal symptom reveal that 62.9% of the sample were army officers who reported that the average age of their first drink was 18.4 years old, The main reasons for drinking ranged from relaxation, fun, celebration, to health. They did not consider abstinence, although they had already known about the implications of alcohol consumption relating to their health, work, finance, and families. A study on the cause of death among the soldiers indicated that among the top five were road accidents (26.9%), followed by cancer (19.4%), AIDS (14%), liver cirrhosis (11.8%), and myocardial infarction (9.78%), which raised concerns of the army that alcohol drinking increases health risk behavior (Sukmee, 2006). MacQueen et al. (1996) found that Thai soldiers who drank alcohol had a high risk of having sexual diseases and did not use a condom when visiting a brothel. This result made military agencies recognize the impact of alcohol on the health of their troops. Concerns about alcohol drinking problems led the Thai Army Welfare Office to launch and implement several campaigns to reduce alcohol consumption in the military. The regulations were enforced to prohibit distribution of alcoholic beverages at a grocery shop in a military unit (Banmuang Newspaper, 2012).

Drinking behavior is a social problem, which undermines the nation's human resources, and the impact of drinking alcohol is even more important in the army, as their main priority is to be well-disciplined and refrain from drinking or smoking to maintain physical as well as psychological health. Alcohol drinking among the population is a serious problem, but drinking among the military is likely to cause more problem as Goodwin et al. (2017), who conducted a study in the UK, noted that there are higher levels of alcohol misuse in the military compared to the general population.

Several studies of alcohol consumption behaviors among Thai soldiers were conducted, but none focused on the Thai enlisted military. Information on alcohol drinking behavior among the young enlisted soldier is essential as they are the new blood in the

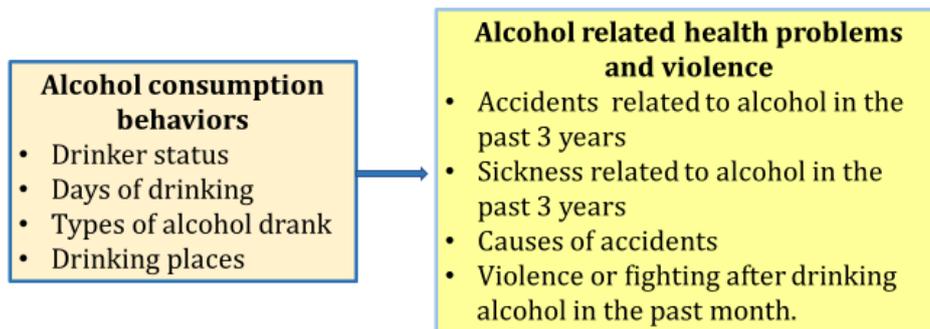
nation's defense human resource. The benefits of this study can be used in guiding for the active planning of alcohol behavior modification and develop effective treatment and prevention for combating alcohol abuse among military personnel.

### Objective

The objective of this study was to explore drinking behaviors, health problems, and violent among enlisted military soldiers.

### Methodology

#### Conceptual Framework



#### Research Method

This cross-sectional study explored drinking behaviors, health problems, and violence among enlisted soldiers. Data was collected from male enlisted soldiers who served at Adisorn Military Camp under the Thai Army located in Saraburi province, Thailand. The sample of 256 enlisted soldiers (13%) was randomly selected from six military units from the total population of 2,000 enlisted soldiers. The IRB approval was obtained from Boromarajonani College of Nursing Saraburi in May 2017.

## **Research Instrument**

The instruments used in this study were self-reported questionnaires: 1) Personal information about age, religion, education, and alcohol use of family; 2) Drinking behaviors comprised of lifetime drinking, types of alcoholic beverages consumed, current drinking, place of drinking, and reason for drinking alcohol; 3) Health problems from drinking consisting of illness and accidents in the past; 4) Violence related to alcohol which consisted of the number of fights and severe injuries after drinking in the past year.

## **Data Analysis**

Descriptive statistics were used to analyze the frequency, percentage, mean, and standard deviation of personal information, drinking behaviors, health problems, and violence from drinking alcohol.

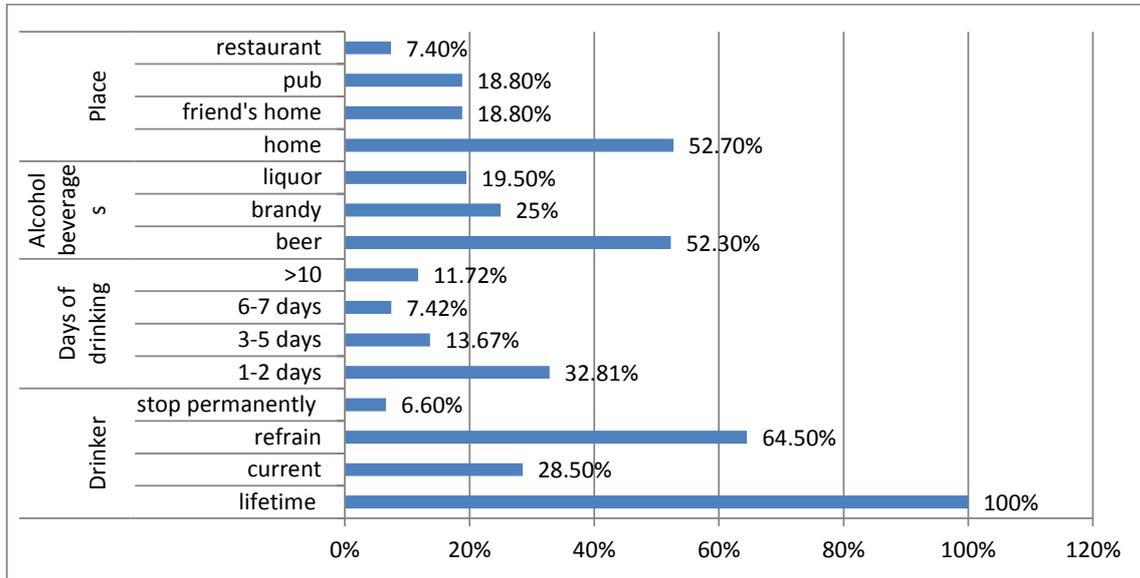
## **Results**

The 256 enlisted soldier participants were all male gender, age 20-22 (93%), Buddhists religion (98%), educational level of high school or lower (93%) and lived with drinking household (76.17%).

### **Alcohol Consumption Behaviors**

Enlisted soldiers in this study were 100% were lifetime drinkers, 28.5% were current drinkers, 64.5% are currently refraining from drinking, and 6.6% have permanently stopped drinking. Among the soldiers currently drinking, drinking in the past month of Thai enlisted soldiers was 32.81% for 1-2 days and 13.67% for 3-5 days of drinking, the least of 7.42% for 6-7 days. Types of alcohol beverages frequently drank were beer (52.3%), brandy (25.0%), and hard liquor (19.5%). The place of drinking alcohol was at home (52.7%), and at a friend's house (18.8%) or pub (18.8%), and at a restaurant (7.4%). The majority of respondents (90.6%) reported that they often drink alcohol with friends.

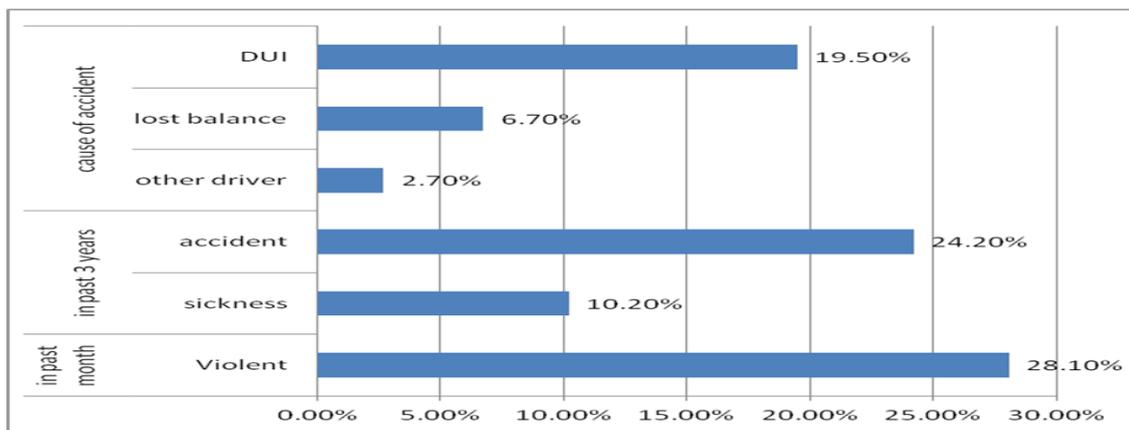
**Figure 1 : Alcohol Consumption Behaviors of Enlisted Soldiers**



**Health Problems**

In the past three years, 10.2% enlisted soldiers had had alcohol-related illnesses. Accidents or injuries related to alcohol in the past three years were reported by 24.2% of the respondents. The causes of accidents were other drunk drivers (2.7%), loss of balance and falls after drinking (6.7%), and own driving under the influence (19.5%). Violence or fighting after drinking alcohol in the past month was reported by 28.1% of all respondents.

**Figure 2: Alcohol-Related Health Problems and Accidents of Enlisted Soldiers**



## **Discussion**

Although it is a small survey and the sample was limited to a cavalry group, this study is the first to explore alcohol use in Thai enlisted soldiers, our study showed a higher rate of drinking than a study of the Sri Lanka military where 54.81% drank alcohol less than one time and 37.87% drank 2-4 times a month (Hanwella, de Silva, & Jayasekera, 2012). Likewise, the study among the US military personnel age 21-25 years old showed increasing alcohol consumption, especially among high school graduate soldiers (Williams, Bell, & Amoroso, 2002). Types of frequent alcoholic drinks among the drinkers in this study included beer (52.3%), dark rum (25.0%), white rum (19.5%), and cool drinks (3.2%). The proportion of soldiers current drinking was 28.5%, in contrast with the higher alcohol consumption of 61.2% found in military personnel (Aekbunasingh, Kengkarnpanich, Kengkarnpanich, & Sinnhung, 2007). Interestingly, the findings revealed that being an enlisted soldier and having undergone army training could stop soldiers' alcohol drinking. Moreover, 64.5% of enlisted soldiers in this current study had temporarily stopped drinking, and 6.6% had permanently stopped drinking. Being in the military training camp with strict rules and regulations may have been an essential reason for them to stop drinking. If caught drinking alcohol, they will face a severe penalty.

The results indicated that being in the training camp with strict rules and regulations of proper military manner may be likely to stop enlisted soldiers from drinking alcohol, but previous studies of alcohol drinking behaviors among soldiers in the army camps indicated the contrary (Aekbunasingha, Kengkarnpanich, Kengkarnpanich, & Sinnhung, 2007; Daengthoen, Saengcharnchai, Yingwiwattanapong, & Pernparn, 2012); soldiers are among those who drank alcohol. Members of the military are heavier drinkers than those in other professions, and members of the cavalry drink more than other branches of the military. Interestingly, the research about alcohol use among US Marines soldiers indicated that among the primary factors that interfere with Marines making healthier choices with regards to alcohol use is the perception that heavy drinking is inextricable from Marine Corps life, with the myth that heavy drinking is part of being in the Marine Corps (Simon-Arndt, Hurtado, & Patriarca-Troyk, 2006).

In this study, alcohol-related health problems included 10.2% experiencing illness and 24.2% experiencing accidents or injuries. The causes of accidents were other drunk drivers (2.7%), loss of balance and fall after drinking (6.7%), and driving under the influence (19.5%). Violence or fighting after drinking alcohol was 28.1%. There have been reports of drunken, risky health behaviors including driving a car over the speed limit, and

not wearing a seat belt at a rate of five times higher than the average group (Williams, Bell, & Amoroso, 2002).

There are reports of adverse impacts from drinking among military personnel including 39.3% experiencing impaired physical function while driving a vehicle after one hour of drinking (Aekbunsingha et al., 2007), 56.8% experiencing a hangover, 14.5% feeling regret for their actions, 12.6% unable to recall event, 16.6% fighting, 7.9% experiencing road accidents, 9.5% behaving violently, 9.3% experiencing vandalism of their property, 8.7% driving under the influence, and 4.4% of suicidal ideation (Lande, Marlin, Chang, & Lande, 2007).

It was found that alcohol drinkers faced mental health symptoms such as depression/anxiety and post-traumatic stress and potential adjustment difficulties/risks (Barry et al., 2012). Foran, Heyman, and Slep (2011) also found that the binge drinkers experience mental health and perceived financial stress. These factors were significant mediators between community functioning and hazardous drinking for men and women

### **Conclusion and Suggestions**

This study explored drinking behaviors and alcohol-related health problems and violence in enlisted Thai soldiers. The findings pointed to risks of problems among young enlisted soldiers. These results can be used for developing health-promotion behaviors and other development projects to prevent future problems and to maintain the health of army personnel. Moreover, the program should include supervisors and family members to support and participate in program activities since the majority of enlisted soldiers were living with family members who drink at home. The army should establish a firm policy regarding alcohol culture and set punishment and reward measures to control and motivate the desired alcohol use behaviors of soldiers in the army unit.

As the web-based programs and online social media were widely used for a variety of health education, risk reduction, and health promotion purposes, these technologies can be a valuable tool in the effort to provide alcohol prevention messages to the enlisted Thai soldiers nationwide.

Finally, there are several controversial issues that need to be explored. As the samples in this study were drawn from a Cavalry Camp, future research should expand to other groups as different groups may behave differently. Information from the research could be used to plan more effective alcohol prevention campaigns for the military population as a whole, not only the enlisted group. A temporary cessation of drinking was found, and therefore the reason why and how education or training in the army has an effect (or no effect) in preventing the drinking behaviors should be pursued, including

asking whether strict rules and regulations have a preventive impact on drinking. Those are the research questions that need to be answered.

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