



## CHAPTER VI

### CONCLUSIONS

A cross-sectional survey was presented to describe urban senior high school students' experiences with drinking and driving in Vientiane municipality of Laos. The following conclusions on the findings were drawn:

#### **1. What are the Socio-demographic Characteristics of Senior High School Students in Vientiane Municipality?**

The randomly selected senior high school students in this study represented grade 4, 5 and 6 of seven high schools in Vientiane, with an age ranging from 13 to 21 years and a median age of 17 years and parity between females and males.

Students came from different economic strata with a monthly family income ranging from 100,000 Kip to 30,000,000 Kip. The mean family income was 1,245,120 Kip/month (SD 253.86). In addition to family income, 55.8% of the students reported an own income ranging from 10,000 Kip to 500,000 Kip/month, while the mean students' own income was 113,535 Kip/month (SD 90.24).

#### **2. How do Students Describe their Own Driving Behavior?**

Some of the students started as early as 7 years to drive a motorbike while others only started driving at the age of 18-19. The median age to start driving a motorbike was 17 years.

The majority (69.3%) had between 1 and 3 years of driving experience.

Only 18.5% of the students had a driving license and among those the majority (60.8%) obtained the license during the last year.

Although the majority of students did not face police warnings, fines or accidents due to overtaking in restricted zones, they do practice overtaking and shifting lanes even in heavy traffic.

As described in Chapter-4, students reported on their driving style the following:

- Although the majority of students did not report to show off their driving skills, or speed up when friends ask for and avoid fast driving when it rains, they did wonder off in thoughts, turned to friends on the road and occasionally ignored traffic lights.
- Students stated not to stop in non-stop zones or pick up friends in these zones or stop at crowded areas, but tended not to remove their broken vehicles from mainstream traffic and they tend to stop at bus-stop areas.
- Students indicated to violate traffic signals, such as speeding up for yellow traffic lights, following other violating vehicles or not stopping before the stop-line.
- Especially the use of a helmet is worrisome, as 55.6% stated never to use a helmet and 31.7% rarely used a helmet.

### **3. What Drinking Experience do Students have?**

Of all respondents 70.7% drink some kind of alcoholic beverage, but beer was most commonly used (56.3%) among those who drink. The majority of students (46.6%) replied to take alcoholic beverages 1-2 times a month, while 11.5% stated to drink alcohol 2-3 a week. Drinking with friends was most common (79.3%).

Although the majority (68.5%) stated to drink 1-4 drinks at one occasion, 31.6% replied to drink more than 5 drinks at one occasion. About half of the students (49.5%) stated to drink six alcoholic drinks or more at one occasion sometimes. The majority (47.5%) used to drink at a friend's house, but 31.8% used to take alcoholic beverages at public places such as beer gardens, restaurants or karaoke bars. The most common occasions for drinking alcoholic beverages were having a party (52.3%) and family events (24.4%). Only about half of the students (54.6%) stated never to drive after drinking.

### **4. What are the Students' Experiences with Road Traffic Accidents?**

Of all student respondents 43.1% faced motorcycle accidents, but for 90.0% of them it was once or twice only. As described in Chapter-4 the higher the frequency of accidents that higher the proportion of students that used alcoholic beverages. Findings were not conclusive on the severity of injuries between non-alcohol and alcohol use.

## **5. What is the Relationship between Socio-demographic Characteristics, Driving Experience, Drinking Experience and Road Traffic Accidents?**

The majority of students (69%) had 1-3 year driving experience and there was not statistically significant difference between males and females.

Also the majority of students (81.5%) did not hold a driving license and there was no statistically significant difference between males and females. There was a statistical significant difference between age and holding a driving license. However, the majority of students not having a driving license were aged 16-17, this age group represented more than half of the population. The majority of those who held a driving license did so for about one year only. There was no statistical significant difference for gender and age groups and holding a driving license.

There was a statistical significant difference between gender and driving style. Male respondents reported more overtaking, reckless driving and stopping on non-stop zones compared with female respondents.

Male students were more likely to use alcohol. There was a statistical significant difference for age groups and drinking, however, the age group 16-17 represented more than half of the respondents. Beer was the most common alcoholic beverage for both females and males. The statistical significant difference for age groups and type of alcoholic beverage can be explained by the fact that more than half of the respondents represented the age group 16-17 years.

There was no statistically significant difference between drinking frequency gender and age. There was a statistically significant difference between quantity of drinks at one occasion and gender. Males tend to drink more drinks on one occasion than females do. As there was a significant difference in age groups. Throughout the different quantities of alcohol use the age group 16-17 was the majority.

Although both females and males reported to drink 6 or more drinks at one occasion once in a while, males were more likely to do so compared with females and more students group the age group 16-17 did so.

Any age group and any gender group took mostly alcoholic beverages at parties with friends and at family events. No significant difference was found between place of drinking and gender or age groups. Friends' house, at home and public entertainment places are the common drinking places.

There was a significant difference between gender and age groups and driving after drinking. Male students are more likely to drive after drinking than female students especially in the age groups 16-17 and >18.

Alcohol use seems to increase parallel with increase in family income. This is in contrast with students' own income; alcohol use remained fairly stable throughout increasing levels of own income.

A statistically significant difference was found between driving style and drinking habit or no drinking habit. Those that used alcohol showed more overtaking, reckless driving and traffic light violations. Also significant difference was found between driving style and driving after drinking or no driving after drinking. Those that drive after drinking showed more overtaking, reckless driving, stopping in non-stop zones and traffic light violations.

The frequency of road traffic accident experiences increased parallel with age as well as with the duration of driving experience. This because the older students were, the longer their driving experience, therefore the higher their exposure to risk of accidents.

There was a significant difference between drinking and not drinking and road traffic accidents. Those that reported to drink alcoholic beverages faced more accidents. The majority of them used to take alcohol weekly or daily. The frequency of accidents increased after having 6 drinks at one occasion.

There was a significant difference between no accidents and accidents and the occasion for drinking. Those who used to take alcohol regularly reported more accidents than those drinking occasionally. Similarly those who stated to drive after drinking reported significant more accidents than those not driving after drinking.

In conclusion, there is a relationship between driving, drinking and motorcycle accidents. Male students in the age group 16-17 are at higher risk to use alcohol, to drive risky and to face accidents. Findings of this study will be useful to inform health

promotion interventions in Vientiane. Findings were not conclusive on the relationship between severity of injuries and the use of alcohol and helmet. Further study might be needed to explore these relationships.