

## **Abstract**

**Background:** Medical students' experience receiving medical check-up and lifestyle questionnaire and education will be valuable as the leaders of health promotion in the future. This study aimed at assessing the health of medical students by introduction of a medical check-up at University of Health Science (UHS) in Vientiane, Lao PDR. UHS is the only medical university in Lao PDR. There had been no opportunity for students to get medical check-up and health education during their university life.

**Methods:** In this study, self-administered questionnaire was used to assess the lifestyle of medical students in the third and fifth year. Weight, height, and blood pressure of students were measured. Urine samples were collected for urine strip test. The International Physical Activity Question (IPAQ) was used to assess physical activity. The Patient Health Questionnaire 9 (PHQ-9) for depression was used to assess mental health.

**Results:** In total, 299 medical students, 170 female and 129 male, 176 third year and 123 fifth year students, were participated. Their mean age was 22 years old. About five percent of students answered that they were in poor health condition. Prevalence of self-perceived health problems were 7.4% for hearing, 23.0% for seeing, and 48.5% for shortage of sleep. About 70% students were normal BMI, while 3.7% were obese, 12.7% were overweight, and 13.7% were underweight. According to student' perception, 7.0% were obese, 21.7% were overweight, and 16.7% were underweight. Prevalence of hypertension was 7%, and prehypertension was 33%. Hypertension was related with self-perceived body weight, self-perceived intention to improve lifestyles, sugar intake, and alcohol consumption. For dietary habit, 33% have breakfast every day, 28% always have vegetables and fruits, 5% don't add salt to daily meal, and 3.3% rarely have snacks or sweet snacks. Nearly 70% had deep-fried or fast food sometimes or always, 60% take soft drink

sometimes or always, and 11% did not eat meat in a previous week. More than half of students were classified as highly physically active, and 11% were physically inactive. Seventy-nine percent of students plan to improve health condition regarding exercise and diet. Most students (96%) brushed teeth at least twice per day. Sixty-five percent of students never had dental care. Most students (83%) drink alcohol. More than half of them drink alcohol 4-5 glasses or more in one occasion. Four percent of students are current smokers and all smokers were males. Prevalence of severe depression was 0.7%, while moderate and moderately severe depression accounted 11% and 2%, respectively. Significantly, there was gender difference in terms of 1) self-perceived health condition, 2) self-perceived obesity, 3) self-perceived adjustment weight, 4) drinking alcohol and amount of drinking, 5), physical activity, 6) hypertension, and 7) obesity. There was no difference between students' year 3 and 5 regarding 1) BMI, and 2) self-perceived BMI.

Conclusion: Overall, 90.6% of medical students perceived importance of regular medical check-up. Health education after the medical check-up is useful in preventing disease and elevating self-awareness of healthy lifestyle. (488 words).