

主論文の要旨

Tobacco Control Law awareness, enforcement, and compliance among high school students in Myanmar

（ ミャンマーの高校生における
たばこ規制法の認知、施行、遵守 ）

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Introduction

In Myanmar, the Control of Smoking and Consumption of Tobacco Products Law (Tobacco Control Law; TCL), which covers the prohibition of sale of tobacco to minors, and all forms of tobacco advertisement, was enacted in 2006, and has been effective since May 4, 2007. However, rules have been made to date, tobacco industries and many individuals are violating the TCL in different ways. This study aimed to examine the awareness of the TCL among high school students.

Materials and Methods

A cross-sectional study was carried out in the seven high schools from Shan State, Mon State, Bago Region, and Magway Region in November 2015. Firstly, two States (Shan and Mon) and two Regions (Bago and Magway) were selected using simple random sampling with a drawing method. Subsequently, two high schools from each State/Region were selected with the same method. One high school in Magway Region could not participate in the study because of local religious affairs.

Participants were students in grades 10 and 11 who attended school on the day of the survey. The pre-tested self-administered questionnaire was used to collect the data. Chi-square tests were used for hypothesis testing of categorical data. Multiple logistic regression analysis was performed to estimate the odds ratio (OR) and 95% confidence interval (CI) of TCL awareness.

Results

1. The characteristics of participants according to gender

In total, 1,339 high school students were recruited in this study. Of them, 81.4% of boys and 86.5% of girls were aged 15 years or younger at the time of the survey. Of all participants, 11.2% of boys and 1.0% of girls were current smokers, while 21.8% of boys and 0.8% of girls were current smokeless tobacco users (Table 1). Table 2 shows that 78.0% of boys and 86.5% of girls recognized the sale of cigars in or within 100 feet from school, and 83.4 % of boys had ever seen someone selling cigars to minors.

2. The recognition of tobacco advertisement stratified by gender

In total, 75.8% of boys and 69.0% of girls had seen tobacco advertisements more than once a week. Furthermore, 12.6% of boys and 9.2% of girls reported noticing the drawings or paintings of tobacco advertisement on vehicles, walls, and boards. In addition, 35.9% of boys and 32.9% of girls had ever received tobacco products free of charge or as a present, or seen/heard about their distribution free of charge or as a present.

3. The knowledge about tobacco product regulations among the high school students

More than half of the boys (59.6%) and girls (55.7%) had ever heard about the TCL, while 89.0% of boys and 91.2% of girls did not know that violating this law could be punished with a fine and/or imprisonment. No students had ever heard about any actions taken or reporting upon any violation of this law.

4. Awareness of Tobacco Control Law among high school students in Myanmar

The unadjusted OR (95% CI) of a positive answer was 1.29 (1.03-1.60) for students older than 14 years, 1.79 (1.06-3.02) for current smokers, and 1.92 (1.29-2.87) for current smokeless tobacco users. The adjusted OR (95% CI) was higher than 2 for students who had ever seen drawings or paintings of tobacco advertisements, and for those who had received tobacco products free of charge or as a present, or seen/heard about their distribution free of charge or as a present. An adjusted OR below 1 was found for those who had ever seen someone selling cigars to minors and those who had ever received health education.

Discussion

To the best of our knowledge, this was the first study to report on the tobacco control measures among high school students in Myanmar. The results revealed that students who had ever seen drawings or paintings of tobacco advertisements and those who had ever received tobacco products free of charge or as a present or seen/heard about their distribution free of charge or as a present, were twice more likely to know about the TCL than those who had not. Current smokeless tobacco users were more likely to know about the law compared to non-users. Conversely, students who had ever seen someone selling cigars to minors, and those who had ever received health education related to tobacco were less likely to know about TCL.

More than two-thirds of high school students recognized the sale of cigars on or within 100 feet from their school premises, and 83.4% of boys had ever seen someone selling cigars to minors. Young people are very vulnerable and easy to be persuaded to start something new that seems to be fashionable to them, and this kind of curiosity may lead them to try tobacco. The tobacco smoking rate has been increasing among the Myanmar youth, especially among females, showing the highest smoking rate among countries in the Association of Southeast Asian Nations.

The present survey showed that current smokeless tobacco users were more likely to know about the law compared to non-users. Thus, awareness of the TCL might not prevent initiation of smoking and smokeless tobacco use. This finding was in line with a study with Palestine university students. More importantly, 89.0% of boys and 91.2% of girls in the present study did not know that the violation of the TCL could be punished with a fine and/or imprisonment. Moreover, no students in this study reported having ever heard about any actions taken or reporting upon any violation of the TCL. Notwithstanding, the enforcement

of the law is one of the key elements to prevent the initiation of smoking and smokeless tobacco use among young people.

Tobacco control is the most important measure to reduce mortality from non-communicable diseases. However, tobacco advertisements are presented to the population in many ways, as these are not well controlled in Myanmar. In our study, 75.8% of boys and 69.0% of girls in high schools had seen tobacco advertisements more than once a week. Tobacco advertisement activities have continued using different forms and channels in Myanmar, which may lead to smoking initiation among young people.

Most tobacco companies distribute tobacco products and personal goods with the tobacco label free of charge or as a present, and some use brand stretching. Our findings showed that 35.9% of boys and 32.9% of girls had ever received personal goods with the label of tobacco products free of charge or as a present or had seen/heard about this happening. This exposure to tobacco brand names may increase students' curiosity towards tobacco and smokeless tobacco products.

Conclusion

Awareness of the TCL was very low among high school students in Myanmar. In addition, the majority of high school students did not know that violations of this law could be punished with a fine and/or imprisonment. Furthermore, no students in this study reported having ever heard about any actions taken or reporting upon any violation of the TCL, highlighting that just knowledge and awareness of the law might not prevent initiation of smoking and smokeless tobacco use. This study indicated that TCL enforcement and compliance, as well as tobacco-related health education programs, are not satisfactory in Myanmar. Myanmar government needs to reconsider and improve the current tobacco promotion and marketing restrictions in Myanmar.